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If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care centre.

Country	Customer Care Centre ☎	Web Site
EIRE	0818 717 100	www.samsung.com/ie
U.K	0845 SAMSUNG(7267864)	www.samsung.com/uk



BN68-02331D-00



Plasma TV

user manual

imagine the possibilities

Thank you for purchasing this Samsung product.
To receive more complete service, please register
your product at

www.samsung.com/register

Model _____ Serial No. _____



User Instructions

■ Screen Image retention

Do not display a still image (such as on a video game or when hooking up a PC to this PDP) on the plasma monitor panel for more than 2 hours as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, reduce the degree of brightness and contrast of the screen when displaying a still image.

■ Height

The PDP can normally operate only under 2000m in height. It might abnormally function at a place over 2000m in height so do not install and operate there.

■ Heat on the top of the PDP TV

The top side of the product may be hot after long period of use as heat dissipates from the panel through the vent hole in the upper part of the product. This is normal and does not indicate any defect or operation failure of the product. However, children should be prevented from touching the upper part of the product.

■ The product is making a 'cracking' noise.

A 'cracking' noise may occur when the product contracts or expands due to a change of surrounding environment such as temperature or humidity. This is normal and not a defect of the unit.

■ Cell Defects

The PDP uses a panel consisting of 2,360,000(HD-level) to 6,221,000(FHD-level) pixels which require sophisticated technology to produce. However, there may be few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

■ Avoid operating the TV at temperatures below 5°C(41°F)

■ A still image displayed too long may cause permanent damage to the PDP Panel.



Watching the PDP TV in 4:3 format for a long period of time may leave traces of borders displayed on the left, right and centre of the screen caused by the difference of light emission on the screen. Playing a DVD or a game console may cause similar effect to the screen. Damages caused by the above effect are not covered by the Warranty.

■ Afterimage on the Screen.

Displaying still images from Video games and PC for longer than a certain period of time may produce partial afterimages. To prevent this effect, reduce the 'brightness' and 'contrast' when displaying still images.

■ Warranty

- Warranty does not cover any damage caused by image retention.
- Burn-in is not covered by the warranty.

■ Installation

Be sure to contact an authorized service centre, when installing your set in a location with heavy dust, high or low temperatures, high humidity, chemical substance and where it operates continually such as the airport, the train station etc. Failure to do so may cause a serious damage to your set.

Digital TV Notice

- Functionalities related to Digital TV(DVB) are only available in countries/areas where DVB-T (MPEG2 and MPEG4 AVC) digital terrestrial signals are broadcasted or where you have access to a compatible DVB-C(MPEG2 and MPEG4 AAC) cable-TV service. Please check with your local dealer the possibility to receive DVB-T or DVB-C signal.
- DVB-T is the DVB European consortium standard for the broadcast transmission of digital terrestrial television and DVB-C is that for the broadcast transmission of digital TV over cable. However, some differentiated features like EPG (Electric Program Guide), VOD (Video on Demand) and so on, are not included in this specification. So, they cannot be supported at this moment.
- Although this TV set meets the latest DVB-T and DVB-C standards[August,2008], the compatibility with future DVB-T digital terrestrial and DVB-C digital cable broadcasts cannot be guaranteed.
- Some cable-TV providers may charge an additional fee for such a service and you may be required to agree to terms and conditions of their business.
- Some Digital TV functions might be unavailable in some countries or regions and DVB-C might not work correctly with all providers.
- For more information, please contact your local Samsung customer care centre.

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Symbol

	Press
	Note
	One-Touch Button
	TOOLS

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Getting Started

5

English

Getting Started

Checking Parts



Owner's Instructions



Remote Control/
AAA Batteries (2ea)



Power Cord



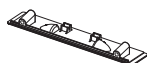
Cloth-Clean



Holder-Wire Cable



Screw (4ea)



Cover-Bottom



Holder-Ring (4ea)



Ferrite Core for
Power Cord



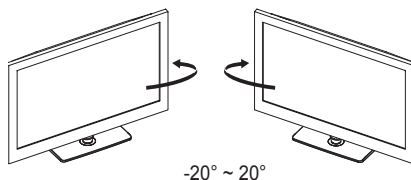
Ferrite Core for
Headphone

- The ferrite core is used to shield the cable from interference. When connecting a cable, open the ferrite core and clip it around the cable near the plug.



Using the Stand-Base

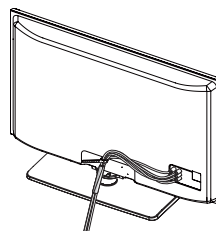
- Two or more people should carry the PDP. Never lay the PDP on the floor because of possible damage to the screen. Always keep the PDP upright.
- The PDP can rotate 20 degrees in right and left directions.



-20° ~ 20°

Assembling the Cables

Enclose the cables in the Holder-Wire Cable so that the cables are not visible through the transparent stand.

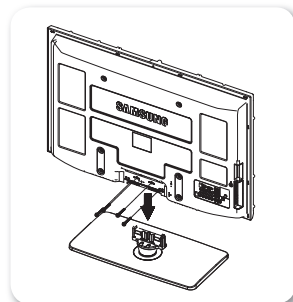


How to assemble the Stand-Base (depending on the model)

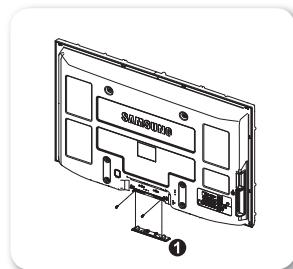
Using the 4 screws for securing the stand base and the monitor, firmly attach the monitor to the stand base. (The exterior of the set may be different than the picture.)



- Firmly secure the stand to the TV before moving it, as the stand may fall and could cause serious injury.
- Two or more people should carry the TV. Never lay the TV on the floor because of possible damage to the screen. Always store the TV upright.

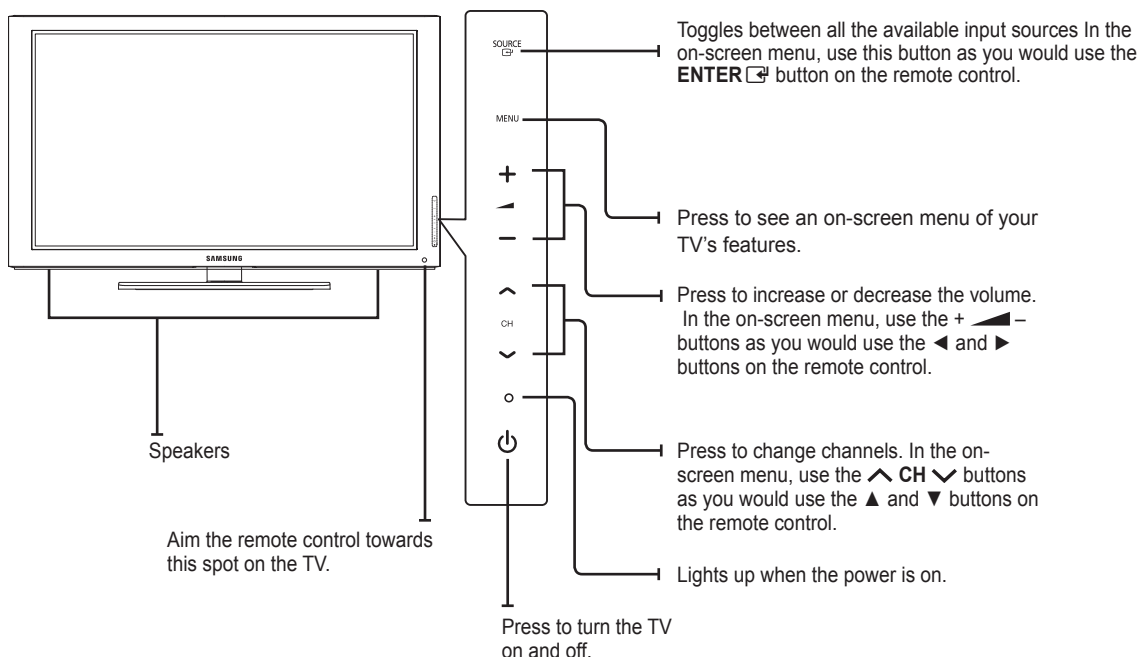


In case of installing your TV on the wall, close the cover ❶ on the stand-base connection part using two screws for hiding.

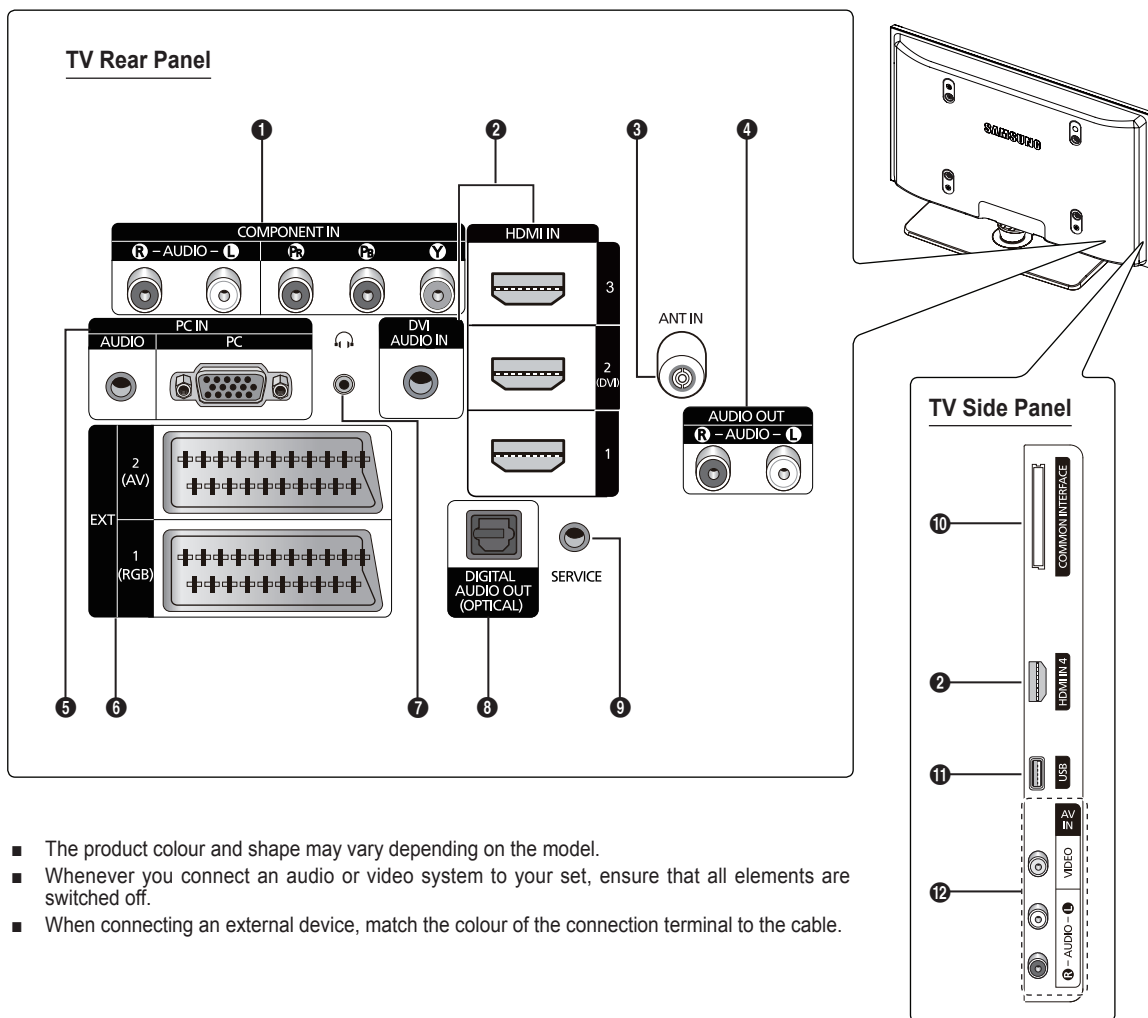


Viewing the Control Panel

- The product colour and shape may vary depending on the model.
- Touch each button to operate.



Viewing the Connection Panel



- The product colour and shape may vary depending on the model.
- Whenever you connect an audio or video system to your set, ensure that all elements are switched off.
- When connecting an external device, match the colour of the connection terminal to the cable.

1 COMPONENT IN

Audio (AUDIO L/R) and video (Y / Pb / Pr) inputs for Component.

2 HDMI IN 1, 2(DVI), 3, 4

No additional Audio connection is needed for an HDMI to HDMI connection.

- When using an HDMI/DVI cable connection, you must use the HDMI IN 2 (DVI) jack.
- What is HDMI?
 - **High Definition Multimedia interface** allows the transmission of high definition digital video data and multiple channels of digital audio.
 - The HDMI/DVI terminal supports DVI connection to an extended device with the appropriate cable (not supplied). The difference between HDMI and DVI is that the HDMI device is smaller in size, has the HDCP (High Bandwidth Digital Copy Protection) coding feature installed, and supports multi - channel digital audio.

DVI AUDIO IN

DVI audio outputs for external devices.

- Supported modes for HDMI/DVI and Component

	480i	480p	576i	576p	720p	1080i	1080p
HDMI/DVI 50Hz	X	X	X	O	O	O	O
HDMI/DVI 60Hz	X	O	X	X	O	O	O
Component	O	O	O	O	O	O	O

3 ANT IN

75Ω Coaxial connector for Aerial/Cable Network.

4 AUDIO OUT(AUDIO R/L)

Connect RCA audio signals from the TV to an external source, such as Audio equipment.

5 PC IN(PC) / (AUDIO)

Connect to the video and audio output jack on your PC.

6 EXT 1, EXT 2

Inputs or outputs for external devices, such as VCR, DVD, video game device or video disc players.

- In EXT mode, DTV Out only supports MPEG SD Video and Audio.
- In EXT Mode, Game mode is not available
- Input/Output Specification

Connector	Input			Output
	Video	Audio (L / R)	RGB	Video + Audio (L / R)
EXT 1	✓	✓	✓	Only TV or DTV output is available.
EXT 2	✓	✓		Output you can choose.

7 HEADPHONE

Connect a set of headphones if you wish to watch a television program without disturbing other people in the room.

- Prolonged use of headphones at a high volume may damage your hearing.

8 DIGITAL AUDIO OUT (OPTICAL)

Connect to a Digital Audio Component.

9 SERVICE

Connector for service.

10 COMMON INTERFACE Slot

Insert CI (CI+) (Common Interface) card into the slot.

- When not inserting **CI (CI+) CARD** in some channels, **Scramble Signal** is displayed on the screen.
- The pairing information containing a telephone number, CI (CI+) CARD ID, Host ID, and other information will be displayed in about 2~3 minutes. If an error message is displayed, please contact your service provider.
- When the channel information configuration has finished, the message **Updating Completed** is displayed, indicating that the channel list is now updated.
- Insert the CI (CI+)-Card in the direction marked on it.
- CAM is not supported in some countries and regions, check with your authorized dealer.
- The CI+ function is only applicable to PS*****P model. If you have some problems, please contact to service provider

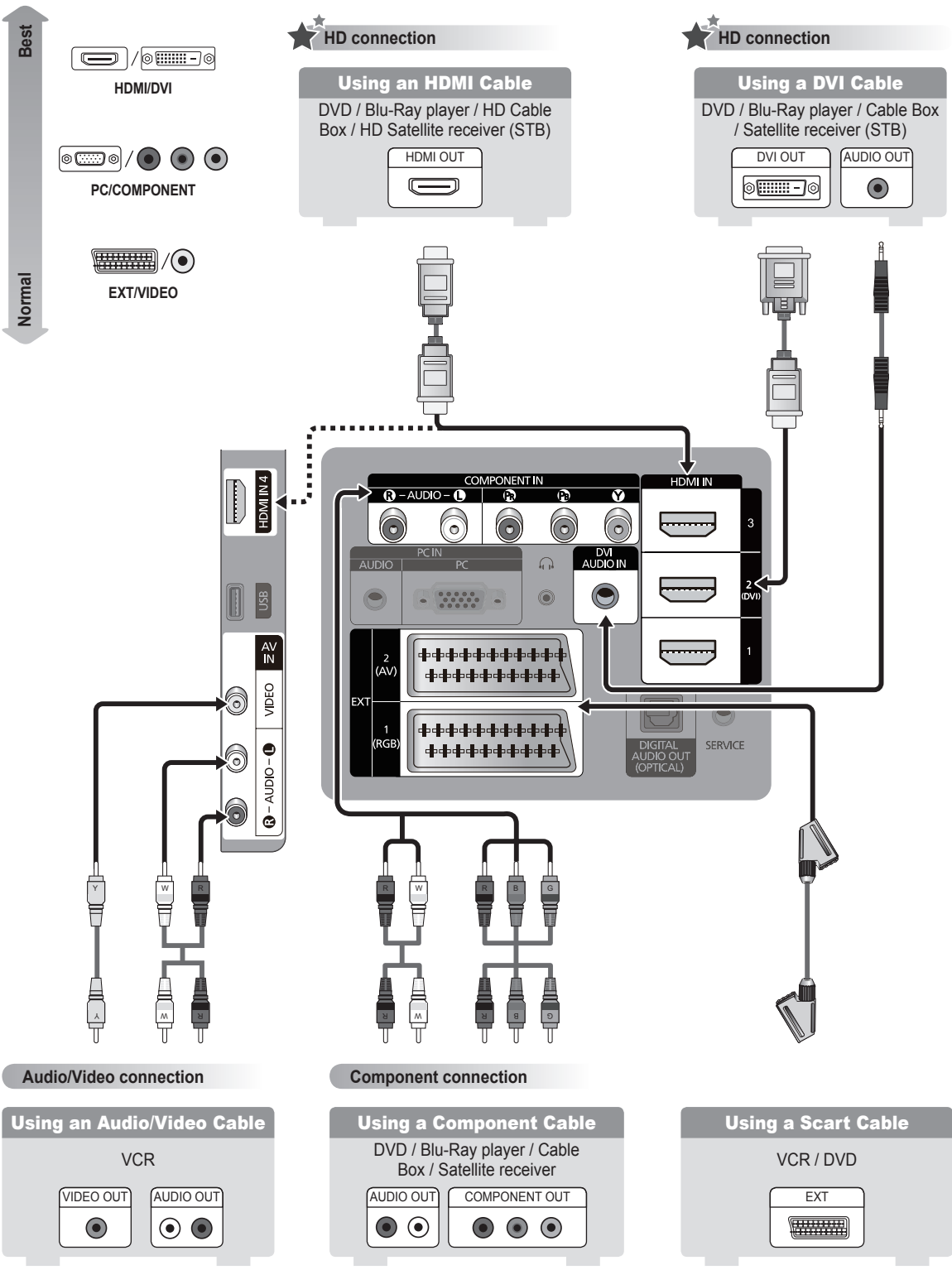
11 USB

Connect a USB mass storage device to view and play photo files (JPEG) and audio files (MP3).

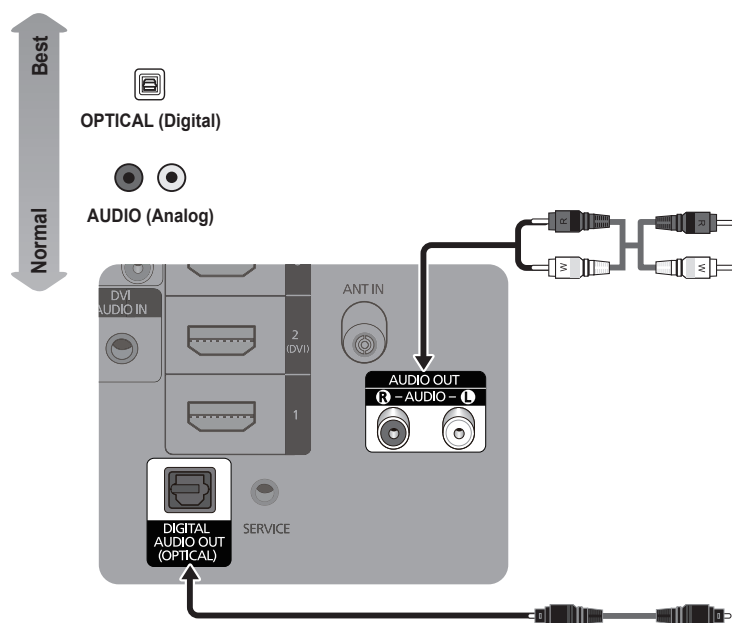
12 AV IN (VIDEO, AUDIO L/R)

Video and audio inputs for external devices, such as a camcorder or VCR.

Connecting a AV device



Connecting an audio device



Analog Audio connection

Using a Audio Cable

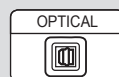
Amplifier / DVD Home Theater



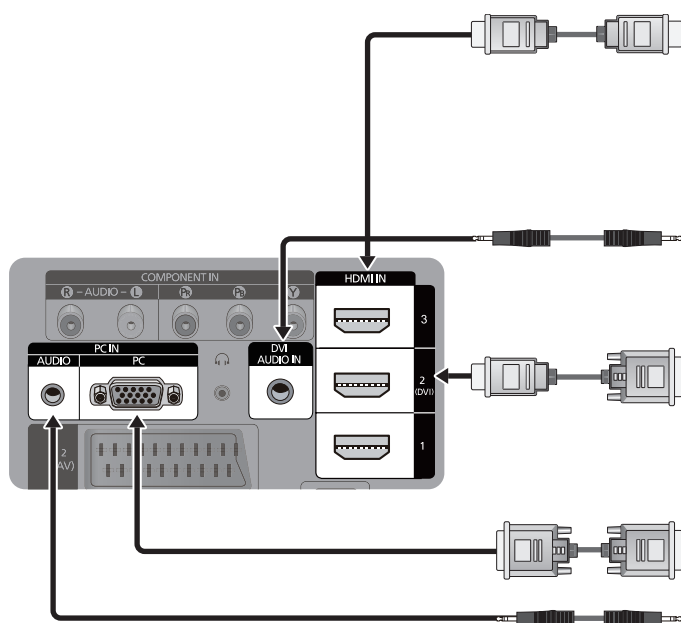
★ Digital Audio connection

Using an Optical Cable

Digital Audio System



Connecting a PC



★ HD connection

Using an HDMI Cable

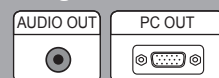


★ HD connection

Using an HDMI/DVI Cable



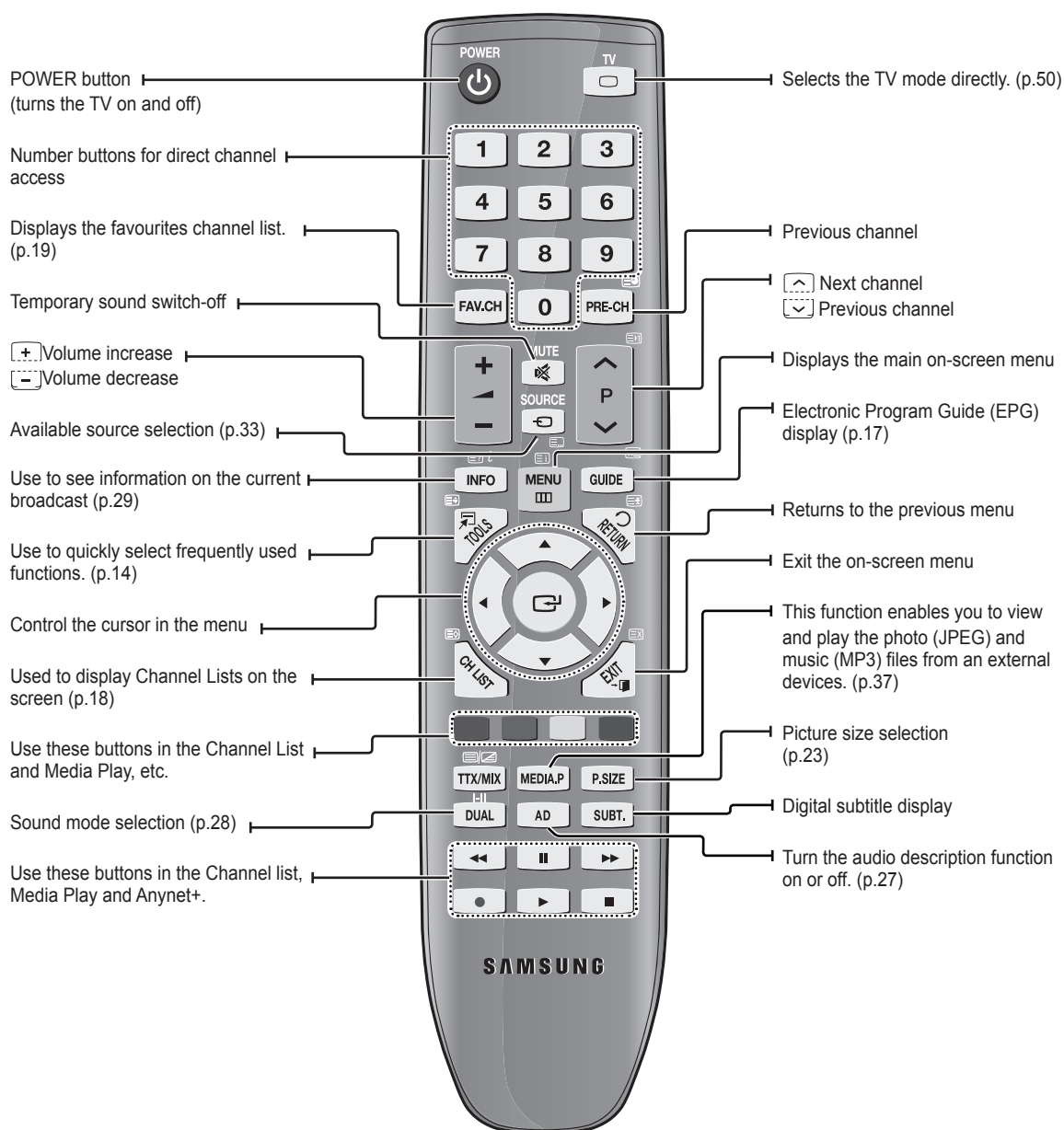
Using a D-Sub Cable



Remote Control

You can use the remote control up to a distance of about 23 feet from the TV.

- The performance of the remote control may be affected by bright light.

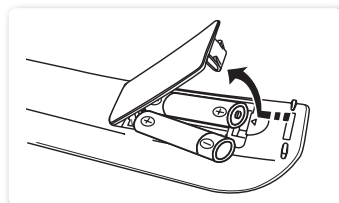


Teletext Functions (p.50)

	Teletext mode selection (LIST / FLOF)		Teletext reveal		Teletext previous page
	Teletext store		Exit from the Teletext display		Teletext index
	Teletext size		Teletext sub page		Teletext hold
	Fasttext topic selection		Teletext next page		Teletext previous page
	Teletext cancel		Teletext on / mix		

Installing Batteries in the Remote Control

- 1 Lift the cover at the back of the remote control upward as shown in the figure.
- 2 Install two AAA size batteries.
 - Make sure to match the '+' and '-' ends of the batteries with the diagram inside the compartment.
- 3 Replace the cover.
 - Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time.
 - If the remote control doesn't work, check the following:
 - Is the TV power on?
 - Are the plus and minus ends of the batteries reversed?
 - Are the batteries drained?
 - Is there a power outage or is the power cord unplugged?
 - Is there a special fluorescent light or neon sign nearby?



Switching On and Off

The mains lead is attached to the rear of your set.

- 1 Plug the mains lead into an appropriate socket.
 - The standby indicator lights up on your set.
- 2 Press the **POWER** button on your set.
 - You also can press the **POWER** button or the **TV** button on the remote control to turn the TV on. The programme that you were watching last is reselected automatically.
- 3 Press the numeric button (0~9) or channel up / down (▲ / ▼) button on the remote control or **▲ CH ▼** button on your set.
 - When you switch the set on for the very first time, you will be asked to choose language in which the menus are to be displayed.
- 4 To switch your set off, press the **POWER** button again.

Placing Your Television in Standby Mode

Your set can be placed in standby mode in order to reduce the power consumption. The standby mode can be useful when you wish to interrupt viewing temporarily (during a meal, for example).

- 1 Press the **POWER** button on the remote control.
 - The screen is turned off and a red standby indicator appears on your set.
- 2 To switch your set back on, simply press the **POWER** button, numeric buttons (0~9), **TV** button or channel up / down (▲ / ▼) button again.
 - Do not leave your set in standby mode for long periods of time (when you are away on holiday, for example). It is best to unplug the set from the mains and aerial.

Basic Operation

13

English

Basic Operation

Plug & Play Feature

When the TV is initially powered on, basic settings proceed automatically and subsequently.

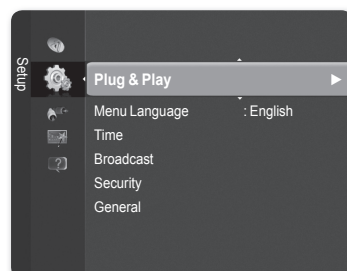
- 1 Press the **POWER** button on the remote control. **Select the OSD Language.** menu is automatically displayed. Select the appropriate language by pressing the **▲** or **▼** button.
Press the **ENTER** button to confirm your choice.
- 2 Press the **◀** or **▶** button to select **Store Demo** or **Home Use**, then the **ENTER** button.
 - We recommend setting the TV to **Home Use** mode for the best picture in your home environment.
 - **Store Demo** mode is only intended for use in retail environments.
 - If the unit is accidentally set to **Store Demo** mode and you want to return to Home Use (Standard): Press the Volume button on the TV. When the volume OSD is displayed, press and hold the **MENU** button on the TV for 5 seconds.
- 3 Press the **ENTER** button. Select the appropriate country by pressing the **▲** or **▼** button. Press the **ENTER** button to confirm your choice.
- 4 Press the **▲** or **▼** button to memorize the channels of the selected connection, then press the **ENTER** button.
 - **Air:** Air antenna signal.
 - **Cable:** Cable antenna signal.
- 5 Press the **▲** or **▼** button to select the channel source to memorize. Press the **ENTER** button to select Start.
 - **Digital & Analogue:** Digital and Analogue channels.
 - **Digital:** Digital channels.
 - **Analogue:** Analogue channels.
 - For more detailed description of selecting Cable mode, refer to page 15.
 - The channel search will start and end automatically.
- 6 The message **Set the Clock Mode** is displayed. Press the **ENTER** button. Press the **▲** or **▼** button to select **Auto**, then Press the **ENTER** button.
 - If you select **Manual**, **Set current date and time** is displayed.
 - If you have received a digital signal, the time will be set automatically.
- 7 The brief instruction on **How to get the best performance from your new HDTV.** is displayed. Press the **ENTER** button.
 - This menu is available **HD Connection Guide** in the **Support** menu.
- 8 The message **Enjoy your TV.** is displayed. When you have finished, press the **ENTER** button.



- If you accidentally select the wrong country for your TV, the characters on the screen may be wrongly displayed.
- The Screen Saver is activated if there is no remote control key input for longer than 1 minute while Plug & Play is running.
- The Screen Saver is activated if there is no operating signal for longer than 15 minutes.

If you want to reset this feature...

- 1 Press the **MENU** button to display the menu. Press the **▲** or **▼** button to select **Setup**, then press the **ENTER** button.
- 2 Press the **ENTER** button again to select **Plug & Play**.
- 3 Enter your 4 digit PIN number.
 - The default PIN number of a new TV set is '0-0-0-0'.
 - If you want to change PIN number, refer to 29 page.

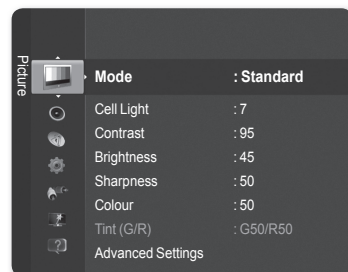


- The **Plug & Play** feature is only available in the **TV** mode.

Using the Menus

Viewing the Menus

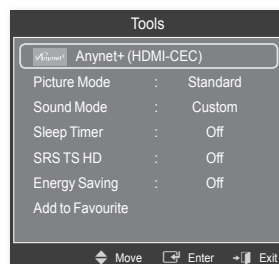
- 1 With the power on, press the **MENU** button. The main menu appears on the screen. The menu's left side has icons: **Picture**, **Sound**, **Channel**, **Setup**, **Input**, **Application**, **Support**.
- 2 Press the **▲** or **▼** button to select one of the icons. Then press the **ENTER** button to access the icon's sub-menu.
- 3 Press the **EXIT** button to exit.
 - The on-screen menus disappear from the screen after about one minute.



Using the TOOLS Button

You can use the **TOOLS** button to select your frequently used functions quickly and easily. The **Tools** menu changes depending on which external input mode you are viewing.

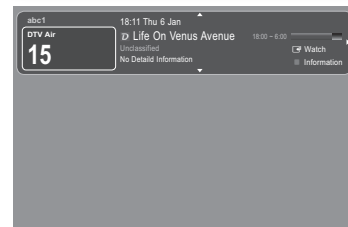
- 1 Press the **TOOLS** button. The **Tools** menu will appear.
- 2 Press the **▲** or **▼** button to select a menu, then press the **ENTER** button.
- 3 Press the **▲** / **▼** / **◀** / **▶** / **ENTER** buttons to display, change, or use the selected items. For a more detailed description of each function, refer to the corresponding page.



Viewing the Display

The display identifies the current channel and the status of certain audio-video settings.

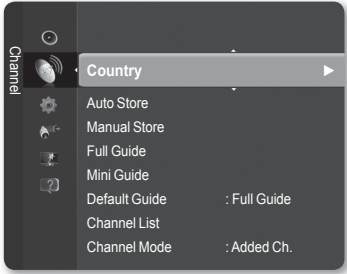
- 1 Press the **INFO** button to viewing the information.
 - Press the **INFO** button on the remote control. The TV will display the channel, the type of sound, and the status of certain picture and sound settings.
 - **▲**, **▼**: You can view other channel's information. If you want to move to the currently selected channel, press **ENTER** button.
 - **◀**, **▶**: You can view the desired program's information at the current channel.



- Press the **INFO** button once more or wait approximately 10 seconds and the display disappears automatically.

Channel Menu

Channel	
Option	Description
Country	■ Digital Channel You can change the country for digital channels. ■ Analogue Channel You can change the country for analogue channels. • The PIN number input screen appears. Enter your 4 digit PIN number.
Auto Store	Scans for all channels with active broadcast stations (and availability depends on your country) and stores them in the TV's memory. You can memorize the channels of the selected connection. ■ Air / Cable Antenna source to memorize When selecting Cable, • Search Mode → Quick – Network ID: Displays the network identification code. – Frequency: Displays the frequency for the channel. – Modulation: Displays available modulation values. – Symbol Rate: Displays available symbol rates. • Search Mode → Full / Network – Start Frequency: Displays the frequency start values. – End Frequency: Displays the frequency stop values. – Modulation: Displays available modulation values. – Symbol Rate: Displays available symbol rates. You can memorize the Channel source • Digital & Analogue: Digital and Analogue channels. • Digital: Digital channels. • Analogue: Analogue channels.



■ If you want to stop **Auto Store**, press the **ENTER** button. The **Stop Auto Store?** message will be displayed. Select **Yes** by pressing the ◀ or ▶ button, then press the **ENTER** button.

Channel	
Option	Description
Manual Store	Scans for a channel manually and stores it in the TV's memory. ■ Digital Channel (Digital) Manual store for digital channels. • Channel: Set the Channel number using the ▲, ▼ or number (0~9) buttons. • Frequency: Set the frequency using the number buttons. • Bandwidth: Set the bandwidth using the ▲, ▼ or number (0~9) buttons. When it has finished, channels are updated in the channel list. ■ Analogue Channel Manual store for analogue channel. • Programme (Programme number to be assigned to a channel) Sets the programme number using the ▲, ▼ or number (0~9) buttons. • Colour System → Auto / PAL / SECAM / NTSC4.43 Sets the colour system value using the ▲ or ▼ button. • Sound System → BG / DK / I / L Sets the sound system value using the ▲ or ▼ button. • Channel (When you know the number of the channel to be stored) Press the ▲ or ▼ button to select C (Air channel) or S (Cable channel). Press the ► button, then press the ▲, ▼ or number (0~9) buttons to select the required number. – If there is abnormal sound or no sound, reselect the sound standard required. • Search (When you do not know the channel numbers): Press the ▲ or ▼ button to start the search. The tuner scans the frequency range until the first channel or the channel that you selected is received on the screen. • Store (When you store the channel and associated programme number): Set to OK by pressing the ENTER  button.



■ **Digital Channel** is only available in DTV mode.



■ **Analogue Channel** is only available in analogue TV mode.

■ **Channel mode**

- **C** (Air channel mode):
You can select a channel by entering the assigned number to each air broadcasting station in this mode.
- **S** (Cable channel mode):
You can select a channel by entering the assigned number for each cable channel in this mode.

Channel	
Option	Description
Full Guide / Mini Guide / Default Guide	The EPG (Electronic Programme Guide) information is provided by the broadcasters. Programme entries may appear blank or out of date as a result of the information broadcast on a given channel. The display will dynamically update as soon as new information becomes available. Full Guide Displays the programme information as time ordered One hour segments. One hours of programme information is displayed which may be scrolled forwards or backwards in time. Mini Guide The information of each programme is displayed by each line on the current channel Mini Guide screen from the current programme onwards according to the programme starting time order. Default Guide → Full Guide / Mini Guide You can decide whether to display either the Full Guide or the Mini Guide when the GUIDE button on the remote control is pressed.



- You can also display the guide menu simply by pressing the **GUIDE** button.

Full Guide

Full Guide	
DTV Cable 900 f tn	2:10 Tue 1 Jun
Freshmen On Campus	
2:00 - 2:30	No Detailed Information
Today	
900 f tn	2:00 - 3:00
901 ITV Play	3:00 - 4:00
902 Kerrang!	Loaded
903 Kiss	Fresh 40 with Dynamite MC
903 onward	The Distillery
903 Smash Hits	Smash Hits! Sunday
Watch Information Page Mini Guide +24 Hours Exit	



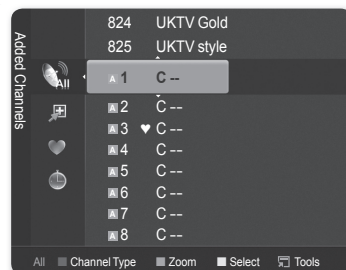
(Red)

Mini Guide

Mini Guide	
DTV Cable 900 f tn	
2:00	Freshmen On Campus
2:30	Street Hypnosis
5:00	Booze Britain
Watch Information Page Full Guide Exit	

▲ / ▼ / ◀ / ▶ , ENTER	Select a programme by pressing the ▲ / ▼ / ◀ / ▶ / ENTER button.
RED	Toggle between the Mini Guide or Full Guide .
GREEN	Full Guide : Scroll backwards quickly (-24 hours).
YELLOW	Full Guide : Scroll forwards quickly (+24 hours).
BLUE	Exit the guide.
INFO	INFO button for the detailed information.

Channel													
Option	Description												
Channel List	Using this menu, you can Add / Delete or set Favourite channels and use the programme guide for digital broadcasts. ■ All Channels Shows all currently available channels. ■ Added Channels Shows all added channels. ■ Favourites Shows all favourite channels. ■ Programmed Shows all current reserved programmes. Select a channel in the All Channels, Added Channels, Favourites, or Programmed screen by pressing the ▲ / ▼ buttons, and pressing the ENTER  button. Then you can watch the selected channel. • Using the Colour buttons with the Channel List – Red (Channel Type): Toggle between your TV, Radio, Data/Other and All. – Green (Zoom): Enlarges or shrinks a channel number. – Yellow (Select): Selects multiple channel lists. • Channel Status Display Icons <table border="1"> <tbody> <tr> <td></td><td>An Analogue channel.</td></tr> <tr> <td></td><td>A channel set as a Favourite.</td></tr> <tr> <td></td><td>A locked channel.</td></tr> <tr> <td></td><td>A channel selected by pressing the</td></tr> <tr> <td></td><td>A programme currently being broadcast.</td></tr> <tr> <td></td><td>A reserved programme</td></tr> </tbody> </table> Channel List Tools Menu (in All Channels / Added Channels / Favourites) • Press the TOOLS button to use the Tools menu. • Tools menu items may differ depending on the channel status. ■ Add / Delete You can delete or add a channel to display the channels you want. • All deleted channels will be shown on All Channels menu. • You can also delete a channel to the Added Channels or Favourites menu in the same manner.		An Analogue channel.		A channel set as a Favourite.		A locked channel.		A channel selected by pressing the		A programme currently being broadcast.		A reserved programme
	An Analogue channel.												
	A channel set as a Favourite.												
	A locked channel.												
	A channel selected by pressing the												
	A programme currently being broadcast.												
	A reserved programme												



- **TOOLS** (Tools): Displays the **Delete** (or **Add**), **Add to Favourite** (or **Delete from Favourite**), **Timer Viewing**, **Edit Channel Name**, **Edit Channel Number**, **Sort**, **Lock** (or **Unlock**), **Select All** (or **Deselect All**), or **Auto Store** menu.
(The Options menus may differ depending on the situation.)



- Press the **CH LIST** button on the remote control to bring up the channel lists.



- A gray-coloured channel indicates the channel has been deleted.
- The **Add** menu only appears for deleted channels.

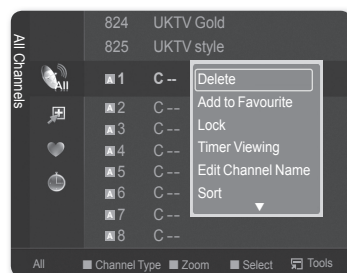
Channel	
Option	Description
Channel List	■ Add to Favourite / Delete from Favourite You can set channels you watch frequently as favourites. - The "♥" symbol will be displayed and the channel will be set as a favourite. - All favourite channels will be shown on Favourite menu.
	■ Lock / Unlock You can lock a channel so that the channel cannot be selected and viewed. This function is available only when the Child Lock is set to On. - The PIN number input screen appears. Enter your 4 digit PIN number. - The default PIN number of a new TV set is '0-0-0-0'. You can change the PIN, by selecting Change PIN from the menu. - The "🔒" symbol will be displayed and the channel will be locked.
	■ Timer Viewing If you reserve a programme you want to watch, the channel is automatically switched to the reserved channel in the Channel List; even when you are watching another channel. To reserve a programme set the current time first. - Only memorized channels can be reserved. - You can set the channel, month, day, year, hour and minute directly by pressing the number buttons on the remote control. - Reserving a programme will be shown on Programmed menu.
	■ Digital Programme Guide and Viewing Reservation When a digital channel is selected, and you press the ► button, the Programme Guide for the channel appears. You can reserve a programme according to the procedures described above.
	■ Edit Channel Name (only analogue channel) Channels can be labeled so that their call letters appear whenever the channel is selected. The names of digital broadcasting channels are automatically assigned and cannot be labeled.
	■ Edit Channel Number (only digital channel) You can also edit the channel number by pressing the number buttons on the remote control.
	■ Sort (only analogue channel) This operation allows you to change the programme numbers of the stored channels. This operation may be necessary after using the auto store.



- Press the **TOOLS** button to display **Tools** menu. You can also add the favourite channel by selecting **Tools** → **Add to Favourite** (or **Delete from Favourite**).



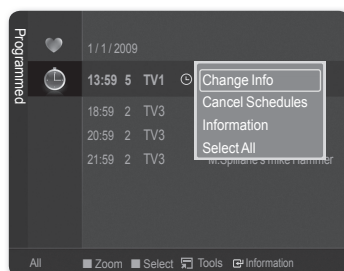
- To select the Favourite channels you have set up, press the **FAV.CH** button on the remote control.



Channel	
Option	Description
Channel List	■ Select All / Deselect All - You can perform the add / delete, add to Favourites / delete from Favourites, or lock / unlock function for multiple channels at the same time. Select the required channels and press the yellow button to set all the selected channels at the same time. - The ✓ mark appears to the left of the selected channels. - You can only select Deselect All when there is a selected channel. ■ Auto Store - For further details on setting up options, refer to page 15. Channel List Tools Menu (in Programmed) You can view, modify or delete a reservation. - Press the TOOLS button to use the tools menu. ■ Change Info: Select to change a viewing reservation. ■ Cancel Schedules: Select to cancel a viewing reservation. ■ Information: Select to view a viewing reservation. (You can also change the reservation information.) ■ Select All / Deselect All: Select or deselect all reserved programmes
Channel Mode	When the press the P button, Channels will be switched within the selected channel list. ■ Added Ch. Channels will be switched within the memorized channel list. ■ Favourite Ch. Channels will be switched within the favourite channel list.
Fine Tune	If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, you may have to fine tune the channel manually. - Fine tuned channels that have been saved are marked with an asterisk * on the right-hand side of the channel number in the channel banner. - If you do not store the fine-tuned channel in memory, adjustments are not saved. - To reset the fine-tuning, select Reset by pressing the button and then press the ENTER button.



- If a channel is locked using the **Child Lock** function, the PIN input window appears.



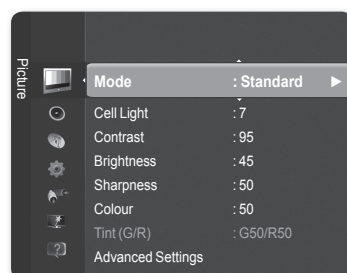
- Only Analogue TV channels can be fine tuned.

Picture Menu

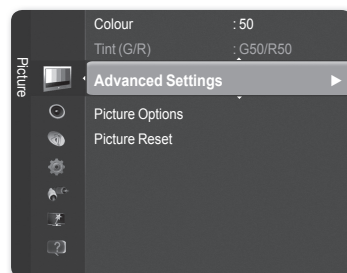
Picture	
Option	Description
Mode	You can select the type of picture which best corresponds to your viewing requirements. ■ Dynamic / Standard / Eco / Movie
Cell Light / Contrast / Brightness / Sharpness / Colour / Tint (G/R)	Your television has several setting options that allow you to control the picture quality. ■ Cell Light: Increases or decreases the light being emitted from the panel with bright images, giving you more depth to the picture. ■ Contrast: Increases or decreases the brightness in white areas of the picture. Too little contrast and the picture may seem dark; too much contrast and the picture will lose details in white images. ■ Brightness: Increases or decreases the overall brightness of the picture, but best used to adjust the black level of the image. Too little brightness and shadow detail will be lost; too much brightness and blacks will be gray and washed out. ■ Sharpness: Increases or decreases the apparent detail in the picture. Too little sharpness and the image might look soft. Too much sharpness can add false edges to objects or can make noise more noticeable. ■ Colour: Increases or decreases colour saturation levels in the picture. Too little colour and the image will be black and white (undersaturated); too much colour and the image will look oversaturated and cartoonish. ■ Tint (G/R): Changes the picture hue from reddish to a greenish appearance. • When you make changes to Cell Light, Contrast, Brightness, Sharpness, Colour or Tint (G/R), the OSD will be adjusted accordingly. • The adjusted values are saved for each picture mode. • In Analogue TV, Ext., AV modes of the PAL system, you cannot use the Tint Function. • In PC mode, you can only make changes to Cell Light, Contrast and Brightness. • Each adjusted setting will be stored separately according to its input mode. • The energy consumed during use can be significantly reduced if the level of brightness of the picture is reduced, and then this will reduce the overall running cost.



- Press the **TOOLS** button to display **Tools** menu. You can also set the picture mode by selecting **Tools** → **Picture Mode**.



Picture	
Option	Description
Advanced Settings	You can adjust the advanced settings for your screen including the colour and contrast. ■ Black Tone → Off / Dark / Darker / Darkest You can enhance the picture depth by adjusting the black colour density. ■ Dynamic Contrast → Off / Low / Medium / High You can adjust the screen contrast so that the optimal contrast is provided. ■ Gamma You can adjust the primary colour (Red, Green, Blue) Intensity. ■ Colour Space Colour Space is a colour matrix composed of red, green and blue colours. Select your favourite Colour Space to experience the most natural colour. • Auto: The TV will choose the colour range that is closest to the range used during TV and movie production. • Native: Display's the most enhanced, vibrant colours possible. • Custom: Provides precise saturation and Colour point adjustment of Red, Green, Blue, Yellow, Cyan, and Magenta. Recommended for advanced users only. Customizing the Colour Space – Adjusts the Colour range to suit your preference. Colour is available when Colour Space is set to Custom. – Colour → Red / Green / Blue / Yellow / Cyan / Magenta – Red / Green / Blue: In Colour, you can adjust the RGB values for the selected colour. – Reset: Resets the colour space to the default values. ■ White Balance You can adjust the colour temperature for more natural picture colours. • R-Offset / G-Offset / B-Offset / R-Gain / G-Gain / B-Gain: Changing the adjustment value will refresh the adjusted screen. • Reset: Resets the default white balance. ■ Flesh Tone You can emphasize the pink flesh tone in the picture. • Changing the adjustment value will refresh the adjusted screen. ■ Edge Enhancement → Off / On You can emphasize object boundaries in the picture. ■ xvYCC Setting the xvYCC mode to on increases detail and colour space when watching movies from an external device (i.e. DVD player).

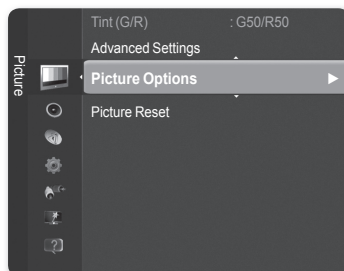


- **Advanced Settings** is available in **Standard** or **Movie** mode.
- In **PC** mode, you can only make changes to **Dynamic Contrast**, **Gamma** and **White Balance** from among the **Advanced Settings** items.



- **xvYCC** is available when the picture mode is set to **Movie**, and the external input is set to **HDMI** or **Component** mode
- This function may not be supported depending on your external device

Picture	
Option	Description
Picture Options	■ Colour Tone → Cool / Normal / Warm1 / Warm2 / Warm3 You can select the most comfortable colour tone to your eyes. • The adjusted values are stored according to the selected Picture mode. • Warm1, Warm2 or Warm3 is only activated when the picture mode is Movie. ■ Size You can select the picture size which best corresponds to your viewing requirements. • Auto Wide: Sets the picture in Auto Wide format. • 16:9: Sets the picture to the 16:9 aspect ratio. • Wide Zoom: Select this menu to view 4:3 aspect ratio pictures over a 16:9 aspect ratio TV by stretching the 4:3 picture vertically. • Zoom: Stretches the 16:9 aspect ratio picture vertically. • 4:3: Sets the picture to the 4:3 aspect ratio. • Screen Fit: Displays the full native HD signal that cannot be viewed using a normal TV. – Wide Zoom: Press the ► button to select Position, then press the ENTER button. Press the ▲ or ▼ button to move the screen up / down. Then press the ENTER button. – Zoom: Press the ► button to select Position, then press the ENTER button. Press the ▲ or ▼ button to move the picture up and down. Then press the ENTER button. Press the ► button to select Size, then press the ENTER button. Press the ▲ or ▼ button to magnify or reduce the picture size in the vertical direction. Then press the ENTER button. – After selecting Screen Fit in HDMI (1080i / 1080p) or Component (1080i / 1080p) mode: Select Position by pressing the ◀ or ▶ button. Use the ▲, ▼, ◀ or ▶ button to move the picture. – Reset: Press the ◀ or ▶ button to select Reset, then press the ENTER button. You can initialize the setting. – If you use the Screen Fit function with HDMI 720p input, 1 line will be cut at the top, bottom, left and right as in the overscan function. ■ Screen Mode → 16:9 / Wide Zoom / Zoom / 4:3 When setting the picture size to Auto Wide in a 16:9 wide TV, you can determine the picture size you want to see the 4:3 WSS (Wide Screen Service) image or nothing. Each individual European country requires different picture size so this function is intended for users to select it. ■ Digital NR → Off / Low / Medium / High / Auto If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen. • When the signal is weak, select one of the other options until the best picture is displayed. ■ HDMI Black Level → Normal / Low You can directly select the black level on the screen to adjust the screen depth. • This function is active only when the external input connects to HDMI (RGB signals).



- In **PC** mode, you can only make changes to the **Colour Tone**, **Size** and **Screen Burn Protection** from among the items in **Picture Options**.



- Depending on the input source, the picture size options may vary.
- The items available may differ depending on the selected mode.
- In **PC** Mode, only **16:9** and **4:3** mode can be adjusted.
- Settings can be adjusted and stored for each external device you have connected to an input of the TV.
- Temporary image retention may occur when viewing a static image on the set for more than two hours.



- You can select these options simply by pressing the **P.SIZE** button on the remote control.



- This function is available in **Auto Wide** mode.
- This function is not available in **PC**, **Component** or **HDMI** mode.

Picture	
Option	Description
Picture Options	■ 1080 Full HD Motion Demo → Off / On Samsung's new generation PDP panels deliver stunning Full HD motion clarity when viewing fast action sports, movies, and games. • This function is not available in PC, Game or Media Play mode. ■ Film Mode You can optimize the picture mode for watching movies. • Off: Turn the Film Mode function off. • Auto1: Improves the picture quality for fast motion scenes. • Auto2: Allows a smoother text motion on fast motion scenes. – Film mode is supported in TV, Video, Component(480i / 1080i) and HDMI(1080i). ■ Blue Only Mode → Off / On This function is for AV device measurement experts. This function displays the blue signal only by removing the red and green signals from the video signal so as to provide a Blue Filter effect that is used to adjust the Colour and Tint of video equipment such as DVD players, Home Theaters, etc. • Blue Only Mode is available when the picture mode is set to Movie or Standard. ■ Screen Burn Protection To reduce the possibility of screen burn, this unit is equipped with screen burn prevention technology. This technology enables you to set picture movement up/down (Vertical) and side to side (Horizontal). The Time setting allows you to program the time between movement of the picture in minutes. • Pixel Shift: Using this function, you can minutely move pixels on the PDP in horizontal or vertical direction to minimize after image on the screen.

Optimum condition for pixel shift

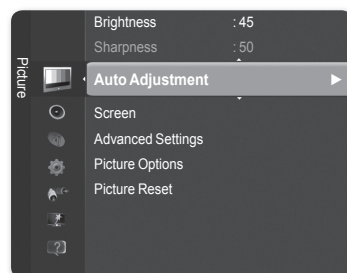
	Item	TV/Ext./AV/Component/ HDMI/PC
Horizontal	0~4	2
Vertical	0~4	4
Time (minute)	1~4 min	2 min



- The Pixel Shift value may differ depending on the monitor size (inches) and mode.
- This function is not available in the **Screen Fit** mode

	• Scrolling: This function helps remove after images on the screen by moving all the pixels on the PDP according to a pattern. Use this function when there are remaining after images or symbols on the screen especially when you displayed a still image on the screen for a long time. • Side Grey: When you watch TV with the screen ratio of 4:3, the screen is prevented from any damage by adjusting the white balance on both extreme left and right sides. – Dark: When you set the screen ratio to 4:3, it darkens the left and right sides. – Light: When you set the screen ratio to 4:3, it brightens the left and right sides.
Picture Reset	■ Reset Picture Mode / Cancel Resets all picture settings to the default values. • Select a picture mode to be reset. The reset is performed for each picture mode.

Picture (In the PC mode)	
Option	Description
Auto Adjustment	Auto Adjustment allows the PC screen of set to self-adjust to the incoming PC video signal. The values of fine, coarse and position are adjusted automatically.
Screen	The purpose of picture quality adjustment is to remove or reduce picture noise. If the noise is not removed by Fine-tuning alone, then adjust the frequency as best as possible (Coarse) and Fine-tune again. After the noise has been reduced, readjust the picture so that it is aligned on the center of screen. ■ Coarse Adjusts the frequency when vertical noise appears on the screen. ■ Fine Adjusts the screen to be clearer. ■ PC Position Adjust the PC's screen positioning if it does not fit the TV screen. Press the ▲ or ▼ Press the button to adjusting the Vertical-Position. Press the ◀ or ▶ button to adjust the Horizontal-Position. ■ Image Reset You can replace all image settings with the factory default values.



- Press the **TOOLS** button to display **Tools** menu. You can also set the adjustment by selecting **Tools** → **Auto Adjustment**.



- **Preset:** Press the **SOURCE** button to select **PC** mode.
- This function does not work in DVI-HDMI mode.

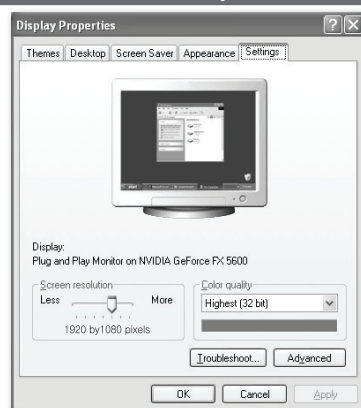
PC Display

Setting Up Your PC Software (Based on Windows XP)

The Windows display-settings for a typical computer are shown below. The actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. However, even if your actual screens look different, the same basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or Samsung Dealer.)

- 1 First, click on 'Control Panel' on the Windows start menu.
- 2 When the control panel window appears, click on 'Appearance and Themes' and a display dialog-box will appear.
- 3 When the control panel window appears, click on 'Display' and a display dialog-box will appear.
- 4 Navigate to the 'Settings' tab on the display dialog-box. The correct size setting (resolution)
Optimum: 1920 X 1080 pixels

If a vertical-frequency option exists on your display settings dialog box, the correct value is '60' or '60 Hz'. Otherwise, just click 'OK' and exit the dialog box.



Display Modes

Both screen position and size will vary depending on the type of PC monitor and its resolution.
The resolutions in the table are recommended.

D-Sub and HDMI/DVI Input

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
IBM	640 x 350	31.469	70.086	25.175	+ / -
	720 x 400	31.469	70.087	28.322	- / +
MAC	640 x 480	35.000	66.667	30.240	- / -
	832 x 624	49.726	74.551	57.284	- / -
	1152 x 870	68.681	75.062	100.000	- / +
VESA CVT	720 x 576	35.910	59.950	32.750	- / +
	1152 x 864	53.783	59.959	81.750	- / +
	1280 x 720	44.772	59.855	74.500	- / +
		56.456	74.777	95.750	- / +
	1280 x 960	75.231	74.857	130.000	- / +
VESA DMT	640 x 480	31.469	59.940	25.175	- / -
		37.861	72.809	31.500	- / -
		37.500	75.000	31.500	- / -
	800 x 600	37.879	60.317	40.000	+ / +
		48.077	72.188	50.000	+ / +
		46.875	75.000	49.500	+ / +
	1024 x 768	48.363	60.004	65.000	- / -
		56.476	70.069	75.000	- / -
		60.023	75.029	78.750	+ / +
	1152 x 864	67.500	75.000	108.000	+ / +
	1280 x 800	49.702	59.810	83.500	- / +
		62.795	74.934	106.500	- / +
	1280 x 960	60.000	60.000	108.000	+ / +
	1280 x 1024	63.981	60.020	108.000	+ / +
		79.976	75.025	135.000	+ / +
	1360 x 768	47.712	60.015	85.500	+ / +
	1440 x 900	55.935	59.887	106.500	- / +
		70.635	74.984	136.750	- / +
	1680 x 1050	65.290	59.954	146.250	- / +
VESA DMT / DTV CEA	1920 x 1080p	67.500	60.000	148.500	+ / +
VESA GTF	1280 x 720	52.500	70.000	89.040	- / +
	1280 x 1024	74.620	70.000	128.943	- / -

- When using an HDMI/DVI cable connection, you must use the **HDMI IN 2 (DVI)** jack.
- The interlace mode is not supported.
- The set might operate abnormally if a non-standard video format is selected.
- Separate and Composite modes are supported. SOG is not supported.
- Too long or low quality VGA cable can cause picture noise at high resolution modes (1920x1080).

Sound Menu

Sound	
Option	Description
Mode	You can select the type of special sound effect to be used when watching a given broadcast. ■ Standard / Music / Movie / Clear Voice / Custom
Equalizer	The sound settings can be adjusted to suit your personal preferences. ■ Mode: You can select a sound mode to suit your personal preferences. ■ Balance: Controls the balance between the right and left speakers. ■ 100Hz / 300Hz / 1KHz / 3KHz / 10KHz (Bandwidth Adjustment): To adjust the level of different bandwidth frequencies ■ Reset: Resets the equalizer settings to the default values.
SRS TruSurround HD	SRS TruSurround HD is the combined technology of TruSurround and FOCUS, TruBass. SRS TruSurround HD is down mixing technology that makes the Surround Sound effect of virtual 5.1 channel via two speakers. This function provide not only rich deep bass at a low-pitched sound but also improve the resolution at a high-pitched sound. • If the sound is abnormal while TV is playing music, please adjust the equalizer and SRS TruSurround HD (Off/On).
Audio Language	You can change the default value for audio languages. Displays the language information for the incoming stream. ■ You can only select the language among the actual languages being broadcast.
Audio Format	When sound is emitted from both the main speaker and the audio receiver, a sound echo may occur due to the decoding speed difference between the main speaker and the audio receiver. In this case, use the TV Speaker function. • You can only select the language among the actual languages being broadcast.
Audio Description	This is an auxiliary audio function that provides an additional audio track for visually challenged persons. This function handles the Audio Stream for the AD (Audio Description), when it is sent along with the Main audio from the broadcaster. Users can turn the Audio Description On or Off and control the volume. ■ Audio Description→ Off / On Turn the audio description function on or off. ■ Volume You can adjust the audio description volume. • Volume is active when Audio Description is set to On.
Auto Volume	Each broadcasting station has its own signal conditions, and so it is not easy to adjust the volume every time the channel is changed. This feature lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.



- Press the **TOOLS** button to display **Tools** menu. You can also configure the sound mode by selecting **Tools** → **Sound Mode**.



- Press the **TOOLS** button to display **Tools** menu. You can also set the **SRS TruSurround HD** by selecting **Tools** → **SRS TS HD**.



- **Audio Language, Audio Format**, and **Audio Description** is only available in DTV mode.

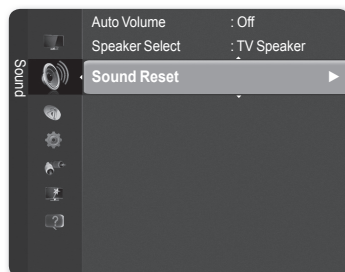


- You can select these options simply by pressing the **AD** button on the remote control.

Sound	
Option	Description
Speaker Select	■ External Speaker / TV Speaker If you want to hear the sound through separate speakers, cancel the internal amplifier. • The – + MUTE buttons do not operate when the Speaker Select is set to External Speaker. • If you select External Speaker in the Speaker Select menu, the sound settings will be limited.

	TV's Internal Speakers	Audio Out (Optical, L / R Out) to Sound System
	TV / Ext. / AV / Component / PC / HDMI	TV / Ext. / AV / Component / PC / HDMI
TV Speaker	Speaker Output	Sound Output
External Speaker	Mute	Sound Output
Video No Signal	Mute	Mute

Sound Reset	■ Reset All / Reset Sound Mode / Cancel You can restore the Sound settings to the factory defaults.
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Selecting the Sound Mode

When you set to **Dual I II**, the current sound mode is displayed on the screen.

	Type of broadcast	On-screen indication		
NICAM Stereo	Regular broadcast (Standard audio)	Mono (Normal use)		
	Regular + NICAM Mono	NICAM	↔	Mono (Normal)
	NICAM-Stereo	NICAM Stereo	↔	zMono (Normal)
	NICAM Dual-I/II	NICAM Dual-1	→ NICAM Dual-2	→ Mono (Normal)
A2 Stereo	Regular broadcast (Standard audio)	Mono (Normal use)		
	Bilingual or DUAL-I/II	Dual I	↔	Dual II
	Stereo	Stereo	↔	Mono (Forced mono)

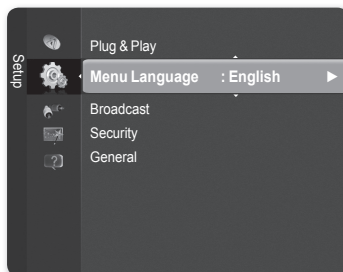
- If the stereo signal is weak and an automatic switching occurs, then switch to the mono.
- This function is only activated in stereo sound signal. It is deactivated in mono sound signal.
- This function is only available in **TV** mode.



- You can select these options simply by pressing the **DUAL** button on the remote control.

Setup Menu

Setup	
Option	Description
Language	You can set the menu language.
Time	■ Clock Setting the clock is necessary in order to use the various timer features of the TV. • Clock Mode You can set up the current time manually or automatically. – Auto: Set the current time automatically using the time from the digital broadcast. – Manual: Set the current time to a manually specified time. • Clock Set You can set the current time manually. – Set up this item when you have set Clock Mode to Manual. – You can set the Day, Month, Year, Hour, Minute directly by pressing the number buttons on the remote control. ■ Sleep Timer The sleep timer automatically shuts off the TV after a preset time. (30, 60, 90, 120, 150 and 180 minutes) • The TV automatically switches to standby mode when the timer reaches 0. • To cancel the Sleep Timer function, select Off. ■ Timer 1 / Timer 2 / Timer 3 You can set the TV to turn on or off at a desired time. • On Time: Set the hour, minute, am/pm, and Activate/Inactivate. (To activate timer with the setting you've chosen, set to Activate.) • Off Time: Set the hour, minute, am/pm, and Activate/Inactivate. (To activate timer with the setting you've chosen, set to Activate.) • Volume: Set the required volume level. • Source: Selects TV or USB device. – When you select the TV, you can set the Antenna and Channel. Antenna: You can select either DTV or ATV when the TV turns on automatically. Channel: Select the desired channel. – When you select the USB, you can set the Contents. Contents: Selects the desired contents on the USB. • Repeat: Select Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun, or Manual. – When Manual is selected, press the ► button to select the desired day of the week. Press the ENTER  button over the desired day and the ✓ mark will appear. – The whole folder on the USB are supports English 64 character. – You must set the clock first. – You can set the hour, minute and programme by pressing the number buttons on the remote control.



- If you disconnect the power cord, you have to set the clock again.



- The current time will appear every time you press the **INFO** button.



- Press the **TOOLS** button to display **Tools** menu. You can also set the sleep timer by selecting **Tools** → **Sleep Timer**.



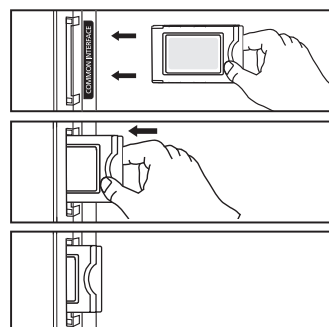
- **Auto Power Off**
When you set the timer On, the television will eventually turn off, if no controls are operated for 3 hours after the TV was turned on by the timer. This function is only available in timer On mode and prevents overheating, which may occur if a TV is on for too long time.

Setup	
Option	Description
Broadcast	■ Subtitle You can activate and deactivate the subtitles. Use this menu to set the Subtitle Mode. Normal under the menu is the basic subtitle and Hard of hearing is the subtitle for a hearing-impaired person. • Subtitle → Off / On: Switches subtitles off or on. • Mode → Normal / Hard of hearing: Sets the subtitle mode. • Subtitle Language: Set the subtitle language. – If the programme you are watching does not support the Hard of hearing function, Normal automatically activates even though Hard of hearing mode is selected. – English is the default in cases where the selected language is unavailable in the broadcast. ■ Digital Text → Disable / Enable If the programme is broadcast with digital text, this feature is enabled. • MHEG (Multimedia and Hypermedia Information Coding Experts Group) An International standard for data encoding systems used in multimedia and hypermedia. This is at a higher level than the MPEG system which includes data-linking hypermedia such as still images, character service, animation, graphic and video files as well as multimedia data. MHEG is user runtime interaction technology and is being applied to various fields including VOD (Video-On-Demand), ITV (Interactive TV), EC (Electronic Commerce), tele-education, tele-conferencing, digital libraries and network games. ■ Teletext Language You can set the Teletext language by selecting the language type. • English is the default in cases where the selected language is unavailable in the broadcast. ■ Preference • Primary Audio Language / Secondary Audio Language / Primary Subtitle Language / Secondary Subtitle Language / Primary Teletext Language / Secondary Teletext Language Using this feature, users can select one of the languages. The language selected here is the default when the user selects a channel. If you change the language setting, the Subtitle Language, Audio Language, and the Teletext Language of the Language menu are automatically changed to the selected language. The Subtitle Language, Audio Language, and the Teletext Language of the Language menu show a list of languages supported by the current channel and the selection is highlighted. If you change this language setting, the new selection is only valid for the current channel. The changed setting does not change the setting of the Primary Subtitle Language, Primary Audio Language, or the Primary Teletext Language of the Preference menu.



■ You can select these options simply by pressing the **SUBT.** button on the remote control.

Setup	
Option	Description
Broadcast	■ Common Interface • Installing the CI Card 1. Purchase the CI CAM module by visiting your nearest dealer or by phone. 2. Insert the CI CARD into the CAM in the direction of the arrow until it fits. 3. Insert the CAM with the CI CARD installed into the common interface slot. – Insert the CAM in the direction of the arrow, right up to the end so that it is parallel with the slot. 4. Check if you can see a picture on a scrambled signal channel. • CI Menu This enables the user to select from the CAM-provided menu. Select the CI Menu based on the menu PC Card. • Application Info. This contains information on CAM inserted in the CI slot and displays it. The Application Info inserting is about the CI CARD. You can install the CAM anytime whether the TV is ON or OFF. – CAM is not supported in some countries and regions, check with your authorized dealer.
Security	■ Child Lock This feature allows you to prevent unauthorized users, such as children, from watching unsuitable programmes by muting out video and audio. • Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number. • The default PIN number of a new TV set is '0-0-0-0'. You can change the PIN by selecting Change PIN from the menu. • You can lock some channels in Channel List. ■ Parental Lock This feature allows you to prevent unauthorized users, such as children, from watching unsuitable programmes by a 4-digit PIN (Personal Identification Number) code that is defined by the user. • The Parental Rating item differs depending on the country. • Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number. • The default PIN number of a new TV set is '0-0-0-0'. You can change the PIN by selecting Change PIN from the menu. • When the parental ratings are set, the  symbol is displayed. • Allow All: Press to unlock all TV ratings. • Block All: Press to lock all TV ratings. ■ Change PIN You can change your personal ID number that is required to set up the TV. • Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number. • The default PIN number of a new TV set is '0-0-0-0'.



- **Child Lock** is available only in TV mode.



- If you forget the PIN code, press the remote control buttons in the following sequence, which resets the PIN to '0-0-0-0': **POWER** (Off),  **MUTE**, **8**, **2**, **4**, **POWER** (On).

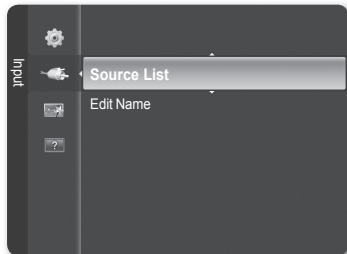
Setup	
Option	Description
General	■ Game Mode When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting the game menu. When the Game Mode is On • Picture Mode is automatically changed to Standard and users cannot change the mode. • Sound Mode is automatically changed to Custom and users cannot change the mode. Adjust the sound using the equalizer. • The Reset in the Sound menu is activated. Reset function initializes the Equalizer settings to the factory default setting. – Game Mode is not available in regular TV mode or Game Mode set to Off. – If the picture is poor when external device is connected to TV, check if Game Mode is On. – If you display the TV menu in Game mode, the screen shakes slightly. – The mark (🎮) appears on the screen which means that Game Mode is on with the selected source. – This function supports only game function. – Game mode is not available in PC mode. ■ Energy Saving → Off / Low / Medium / High / Picture Off This feature adjusts the brightness of the TV in order to reduce power consumption. When watching TV at night, set the Energy Saving mode option to High to reduce eye fatigue as well as power consumption. If you select Picture Off, the screen is turned off and you can only hear the sound. Press any button to get out of Picture Off. – In the Tools menu, Picture Off function is not supported. ■ Menu Transparency You can set the transparency of the on-screen menu. • Bright: Sets the on-screen menu to normal. • Dark: changes the on-screen menu to opaque. ■ Melody → Off / Low / Medium / High The TV power on / off melody sound can be adjusted. • The Melody does not play – When no sound is output from the TV because the 🔊 MUTE button has been pressed. – When no sound is output from the TV because the – (Volume) button has been pressed. – When the TV is turned off by Sleep Timer function.



- Press the **TOOLS** button to display **Tools** menu. You can also set the Energy Saving option by selecting **Tools** → **Energy Saving**.

Input Menu

Input	
Option	Description
Source List	Use to select TV or other external input sources such as DVD players or Cable Box / Satellite receivers (Set-Top Box) connected to the TV. Use to select the input source of your choice. ■ TV, Ext., AV, PC, Component, HDMI1, HDMI2/DVI, HDMI3. • You can choose only those external devices that are connected to the TV. In the Source List, connected inputs will be highlighted and sorted to the top. Inputs that are not connected will be sorted to the bottom. • Using the Colour buttons on the remote with the Source list – Red (Refresh): Refreshes the connecting external devices. – TOOLS (Tools): Displays the Edit Name and Information menus.
Edit Name	You can name the device connected to the input jacks to make your input source selection easier. ■ VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / DVI PC / DVI / TV / IPTV / Blu-ray / HD DVD / DMA • When a PC with a resolution of 1920 x 1080@60Hz is connected to the HDMI IN 2 (DVI) port, you should set the HDMI2 / DVI mode to PC in the Edit Name of the Input mode.



 Press the **SOURCE** button on the remote control to view an external signal source. TV mode can be selected by pressing the **TV** button, number buttons (**0~9**), and the **P** **^** / **v** button on the remote control.

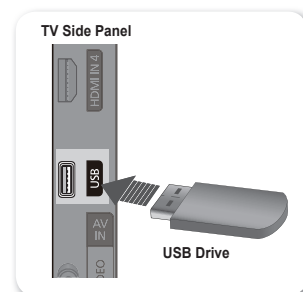
Support menu

Support	
Option	Description
Self Diagnosis	■ Picture Test If you think you have a picture problem, perform the picture test. Check the Colour pattern on the screen to see if the problem still exists. • Does the problem still exist with this test photo? appears on the screen. If the test pattern does not appear or there is noise in the test pattern, select Yes. If the test pattern is properly displayed, select No. – Yes : There may be a problem with the TV. Contact Samsung's Call Center for assistance. – No : There may be a problem with your external equipment. Please check your connections. If the problem still persists, refer to the external device's user manual. ■ Sound Test If you think you have a sound problem, please perform the sound test. You can check the sound by playing a built-in melody sound through the TV. • Does the problem still exist with this sound test? appears on the screen. If during the sound test you can hear sound only from one speaker or not at all, select Yes. If you can hear sound from the speakers, select No. – Yes : There may be a problem with the TV. Contact Samsung's Call Center for assistance. – No : There may be a problem with your external equipment. Please check your connections. If the problem still persists, refer to the external device's user manual. ■ Signal Strength (Digital channels only) You can adjust your antenna to improve the reception of available digital channels. • If the signal strength meter indicates that the signal is weak, physically adjust your antenna to increase the signal strength. Continue to adjust the antenna until you find the best position with the strongest signal.



- If you hear no sound from the TV's speakers, before performing the sound test, make sure **Speaker Select** is set to **TV speaker** in the Sound menu.
- The melody will be heard during the test even if **Speaker Select** is set to **External Speaker** or the sound is muted by pressing the **MUTE** button.

Option	Description
Software Upgrade	To keep your product up-to-date with new Digital Television features then software upgrades are periodically broadcast as part of the normal Television signal. It will automatically detect these signals and display the software upgrade banner. You are given the option to install the upgrade. By USB Insert a USB drive containing the firmware upgrade into TV. Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied. The TV will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete. When software is upgraded, video and audio settings you have made will return to their default (factory) settings. We recommend you write down your settings so that you can easily reset them after the upgrade. By Channel Upgrades the software using the broadcasting signal. - If the function is selected during the software transmission period, this function searches for available software and downloads the software. - The time required to download the software is determined by the signal status. Standby Mode Upgrade To continue software upgrade with master power on, Select On by pressing the ▲ or ▼ button. 45 minutes after entering standby mode, a manual upgrade is automatically conducted. Since the power of the unit is turned on internally, the screen may be on slightly for the product. This phenomenon may continue for more than 1 hour until the software upgrade is completed. Alternative Software Replace the current software with the alternative. - If software was changed, existing software is displayed. - You can change current software to alternative software by Alternative Software.
HD Connection Guide	The brief instruction on How to get the best performance from your new HDTV is displayed. We offer the connection method for HD devices. You can move the previous or next page by pressing the ◀ or ▶ button.
Contact Samsung	You can know the Samsung Call center, website and information for product.



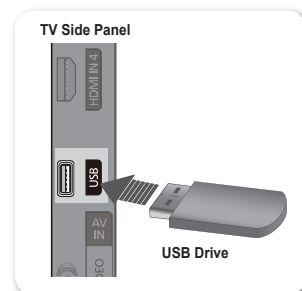
Media Play

Connecting a USB Device

- 1 Press the **POWER** button to turn the TV on.
- 2 Connect a USB device containing photo, and music files to the USB jack on the side of the TV.

Using the Remote Control Button in Media Play Menu

Button	Operations
▲/▼/◀/▶	Move the cursor and select an item.
ENTER	Select the currently selected item. Play or pause the files while playing the slide show or music files.
▶ / ◻	Play or pause the slide show or music file.
RETURN	Return to the previous menu.
TOOLS	Run various functions from the photo, and music menus.
◻	Stop the current slide show, and music file.
◀◀ / ▶▶	Jump to previous group/Jump to next group.
INFO	Show file information.
MEDIA.P	Exit Media Play mode.
P /	Stop Media Play mode and Returns to TV mode.
EXIT	Stop the current function and return to the Media Play main menu.



- Media Play only supports USB Mass Storage Class devices (MSC). MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives, Flash Card Readers and USB HDD (USB HUB are not supported.).
- MTP (Media Transfer Protocol) is not supported.
- The file system only supports FAT16/32 (The NTFS file system is not supported).
- Certain types of USB Digital camera and audio devices may not be compatible with this TV.
- Please connect directly to the USB port of your TV. If you are using a separate cable connection, there may be a USB compatibility problem.
- Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- Do not disconnect the USB device while it is loading.
- MSC supports MP3 and JPEG files, while a PTP device supports JPEG files only.
- The sequential JPEG format is supported.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The maximum supported JPEG resolution is 15360X8640 pixels.
- For unsupported or corrupted files, the **Not Supported File Format** message is displayed.
- If the number of photo files exceeds 4000 (or the number of music files exceeds 3000), any files exceeding the 4000 limit may not be displayed in the Photo List (or Music List).
- MP3 files with DRM that have been downloaded from a non-free site cannot be played.
- DRM(Digital Rights Management) prevents illegal uses of digital media for copyright protection.
- When moving to a photo, loading may take a few seconds. At this point, the loading icon will appear at the screen.

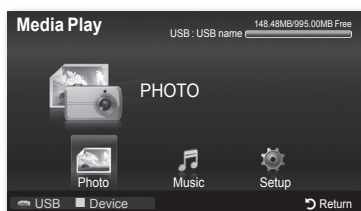
Media Play Function

This function enables you to view and listen to photo, and music files saved on a USB Mass Storage Class (MSC) device.

It might not work properly with unlicensed multimedia files.

Entering the Media Play (USB) Menu

- 1 Press the **MENU** button. Press the **▲** or **▼** button to select **Application**, then press the **ENTER**  button.
- 2 Press the **▲** or **▼** button to select **Media Play (USB)**, then press the **ENTER**  button.
 - The **Media Play** menu is displayed.
- 3 Press the Red button, then press the **▲** or **▼** button to select the corresponding USB Memory Device (i.e. if connected through a hub). Press the **ENTER**  button.
 - This function differs depending on the USB Memory Device connected to TV.
 - The selected USB device name appears at the bottom left of the screen.
- 4 Press the **◀** or **▶** button to select an icon (**Photo**, **Music**, **Setup**), then press the **ENTER**  button.
 - To exit **Media Play** mode, press the **MEDIA.P** button on the remote control.

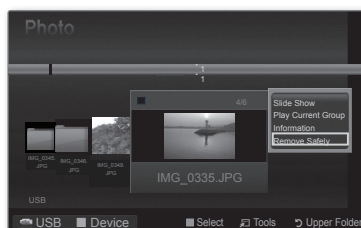


- Press the **SOURCE** button on the remote control repeatedly to select **USB**, then press the **ENTER**  button.
- Press the **MEDIA.P** button on the remote control to display the Media Play menu.

Removing a USB Memory Device Safely

You can remove the device safely from the TV.

- 1 Press the **TOOLS** button in the Media Play file list screen, or while a slide show, or music is being played.
- 2 Press the **▲** or **▼** button to select **Remove Safely**, then press the **ENTER**  button.
- 3 Remove the USB device from the TV.

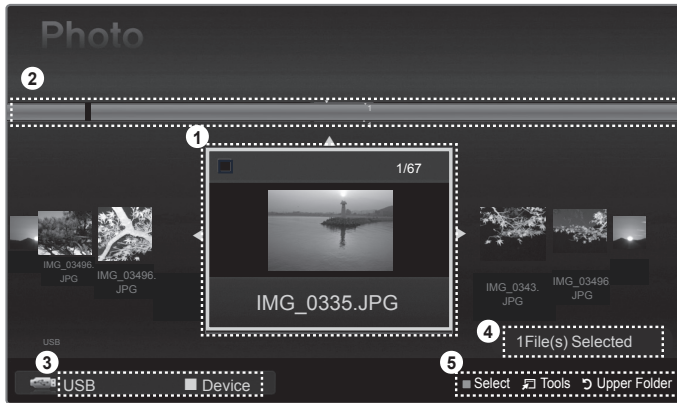


Screen Display

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English

Media Play



- ① Currently selected file: The currently selected file is highlighted.
- ② View Groups: The sorting group including the currently selected photo is highlighted.
 - One group involves the nine photos.
- ③ Current Device: Shows the currently selected device name.
 - Red (**Device**) button: Selects a connected device.
- ④ Item Selection Information: Shows the number of photos that are selected by pressing the Yellow button.
- ⑤ Help Items
 - Yellow (**Select**) button: Selects file from the file list. Selected files are marked with a symbol ✓. Press the yellow button again to cancel a file selection.
 - **TOOLS (Tools)** button: Displays the option menus. (The tools menu changes according to the current status.)
 - **RETURN (Return)** button: Return to previous menu.

Using the Photo List

- 1 Press the **MEDIA.P** button on the remote control to display the **Media Play** menu.
- 2 Press the ◀ or ▶ button to select **Photo**, then press the **ENTER** button.
- 3 Press the ▶ (Play)/**ENTER** button to start the Slide Show in the order selected by the user.
 - The information of a photo file is automatically set.
 - Photos for which information cannot be displayed are set as **Unclassified**.
 - PTP does not support folder sort mode.

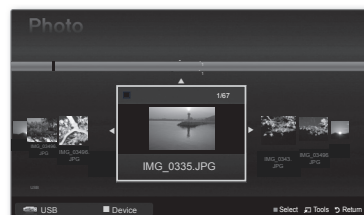
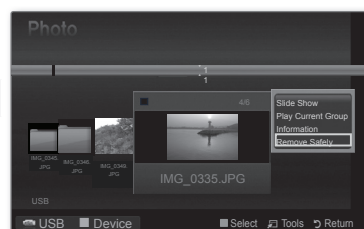


Photo List Tools Menu

Option	Description
Slide Show	You can play a Slide Show using the photo files on the USB memory device.
Play Current Group	You can play a Slide Show using only the photo files in the currently selected sorting group.
Information	The photo file information including the name, the size, the resolution, the date modified and the path is displayed. ■ You can view the information of photo files during a Slide Show using the same procedures.
Remove Safely	You can remove the device safely from the TV.



- Alternatively, select a photo from the photo list and press the **INFO** button to view the information.

Viewing a Photo or Slide Show

Viewing a Slide Show

- 1 Press the ◀ or ▶ button to select the desired photo in the Photo list.
- 2 Press the **TOOLS** button.
- 3 Press the ▲ or ▼ button to select Slide Show, then press the **ENTER** button.
 - All files in the photo list will be used for the Slide Show.
 - During the slide show, files are displayed in order from the currently shown file.
 - The Slide Show progresses in the order sorted in the Photo list.
 - Music files can be automatically played during the Slide Show if the **Background Music** is set to **On**.



- While a photo list is displayed, press the ▶ (Play)/**ENTER** button on the remote control to start slide show.

Slideshow Control Buttons

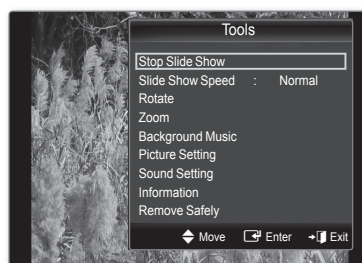
Button	Operations
ENTER button	Play/Pause the Slide Show.
▶ button	Play the Slide Show.
⏸ button	Pause the Slide Show.
■ button	Exit Slide Show and return to the photo list.
◀/▶ button	Change the Slideshow playing speed.
TOOLS button	Run various functions from the Photo menus.

Playing the selected photo files

- 1 Press the ◀ or ▶ button to select the desired photo in the Photo list.
- 2 Press the yellow button. Repeat the above operation to select multiple photos.
 - The ✓ mark appears to the left of the selected photo.
 - To deselect all selected files, press the **TOOLS** button and select **Deselect All**.
- 3 Press the ◻ (Play) / **ENTER** ◻ button.
 - The selected files will be used for the Slide Show.

Slide Show Tools Menu

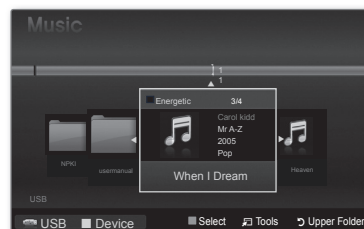
Option	Description
Stop Slide Show / Start Slide Show	You can start or stop a Slide Show.
Slide Show Speed	■ Normal / Slow / Fast You can select the slide show speed only during the slide show. • You can also change the speed of the Slide Show by pressing the ◀◀ (REW) or ▶▶ (FF) button during the Slide Show.
Rotate	■ 0° / 90° / 180° / 270° You can rotate photos saved on a USB memory device. • The rotated file is not saved.
Zoom	■ x1 / x2 / x4 You can magnify photos saved on a USB memory device. • To move the enlarged photo image, press the ENTER ◻ button, then press the ▲/▼/◀/▶ buttons. Note that when the enlarged picture is smaller than the original screen size, the location change function doesn't work. • The enlarged file is not saved.
Background Music	You can set and select background music when watching a Slide Show. ■ Background Music → On / Off ■ Select Music File • If you set Background Music to On, you can select a music file.
Picture Setting / Sound Setting	You can configure the picture and sound settings. Refer to page 42~43.
Information	The photo file information is displayed.
Remove Safely	You can remove the device safely from the TV.



- To use this feature, there must be music on the USB device.
- Loading music files is needed to change BGM mode. Play music files in music category to load.

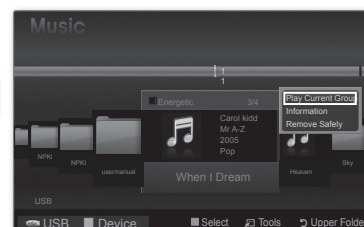
Using the Music List

- 1 Press the **MEDIA.P** button on the remote control to display the **Media Play** menu.
- 2 Press the ◀ or ▶ button to select **Music**, then press the **ENTER**  button.
- 3 Press the **ENTER**  button to start playing music in the order selected by the user.
 - The information of the music files is automatically set.
 - Music files for which information cannot be displayed are set to Unclassified.
 - If there is no title information for a music file, the filename is displayed.



Music List Tools Menu

Option	Description
Play Current Group	You can only play music files in the currently selected sorting group.
Information	The music file information including the name, the size, the date modified and the path is displayed.
Remove Safely	You can remove the device safely from the TV.

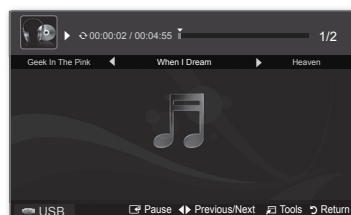


- Alternatively, select a music file from the music list and press the **INFO** button to view the information.

Playing a Music

Playing a music file

- 1 Pressing the ◀ or ▶ button to select a music file to be played.
- 2 Press the  (Play)/**ENTER**  button.
 - This menu only shows files with the MP3 file extension. Files with other file extensions are not displayed, even if they are saved on the same USB device.
 -  (REW) or  (FF) buttons do not function during play.
 - The selected file is displayed at the top with its playing time.
 - To adjust the music volume, press the volume button on the remote control. To mute the sound, press the **MUTE** button on the remote control.
 - The playing duration of a music file may be displayed as '00:00:00' if its playing time information is not found at the start of the file.



Music Play Control Buttons

Button	Operations
ENTER 	Play/Pauses the music file.
	Play the music file
	Pause the music file
	Exit play mode and return to the music list.
TOOLS 	Run various functions from the Music menus.

Music Play Control Buttons

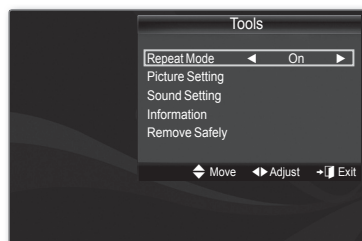
	When all music files in the folder (or the selected file) are repeated. Repeat Mode is On.
	When all music files in the folder (or the selected file) are played once. Repeat Mode is Off.

Playing the selected music files

- 1 Press the ◀ or ▶ button to select the desired music file in the music list.
- 2 Press the yellow button. Repeat the above operation to select multiple music files.
 - The ✓ mark appears to the left of the selected music file.
 - To deselect all selected files, press the **TOOLS** button and select **Deselect All**.
- 3 Press the ◻(Play)/ENTER ◻ button.
 - Only the selected file is played.

Music Play Tools Menu

Option	Description
Repeat Mode	You can play music files repeatedly.
Picture Setting / Sound Setting	You can configure the picture and sound settings. Refer to page 42~43.
Information	The music file information is displayed.
Remove Safely	You can remove the device safely from the TV.

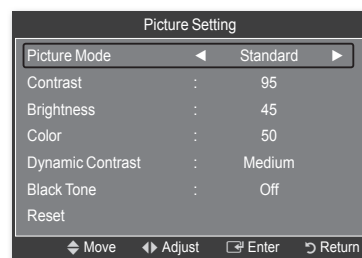


Picture / Music Settings Using Media Play

When watching a Slide Show or listening to music using Media Play, you can set the picture and sound.

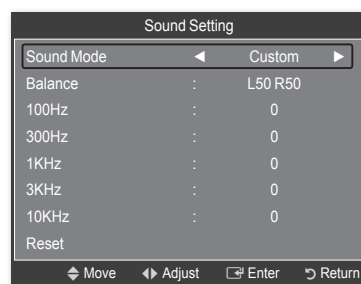
Picture Setting

- 1 Press the **TOOLS** button during a Slide Show or while music is playing.
- 2 Press the ▲ or ▼ button to select **Picture Setting**.
- 3 Press the ◀ or ▶ button to select the **Picture Mode** (**Dynamic**, **Standard**, **Eco**, or **Movie**).
 - When selecting **Dynamic**, **Eco**, you can't adjust **Dynamic Contrast**, **Black Tone**.
- 4 Press the ▲ or ▼ button to move to an item. (**Contrast**, **Brightness**, **Colour**, **Dynamic Contrast**, **Black Tone**, or **Reset**)
 - Select **Reset** to initialize the picture settings.
- 5 Press the ◀ or ▶ button to adjust the settings.



Sound Setting

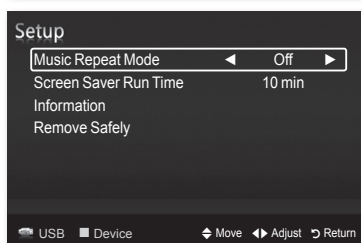
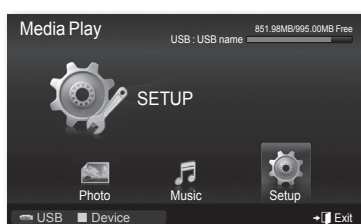
- 1 Press the **TOOLS** button during a Slide Show or while music is playing.
- 2 Press the **▲** or **▼** button to select **Sound Setting**.
- 3 Press the **◀** or **▶** button to select the **Sound Mode**.
(**Standard**, **Music**, **Movie**, **Clear voice**, or **Custom**)
- 4 Press the **▲** or **▼** button to move to an item.
(**Balance**, **100Hz**, **300Hz**, **1KHz**, **3KHz**, **10KHz** (Bandwidth Adjustment), or **Reset**)
 - Select **Reset** to initialize the sound settings.
- 5 Press the **◀** or **▶** button to adjust the settings.



Using the Setup Menu

Setup displays the user settings of the **Media Play** menu.

- 1 Press the **MEDIA.P** button on the remote control to display the **Media Play** menu.
- 2 Press the **◀** or **▶** button to select **Setup**, then press the **ENTER** button.
- 3 Press the **▲** or **▼** button to select the desired option.
- 4 Press the **◀** or **▶** button to select the option.
 - To exit **Media Play** mode, press the **MEDIA.P** button on the remote control.



Option	Description
Music Repeat Mode	Select to repeatedly play music files.
Screen Saver Run Time	■ 10 min / 20 min / 1 hour Select to set the waiting time before the screen saver appears.
Information	Select to viewing the information of the connected device.
Remove Safely	You can remove the device safely from the TV.

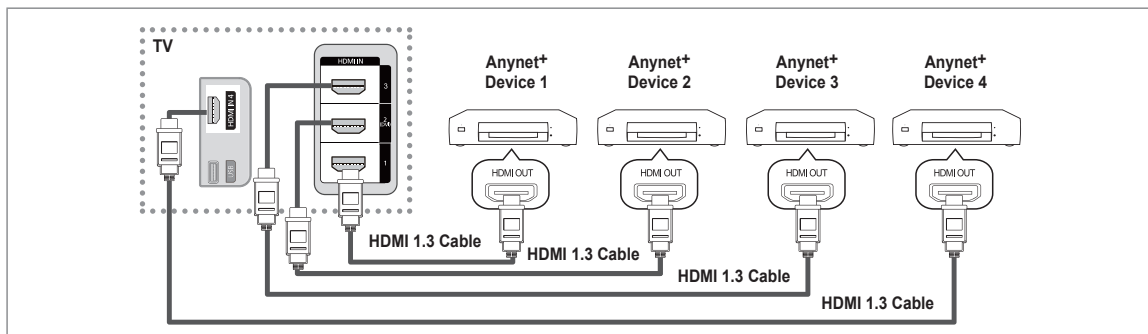
Anynet+

Connecting Anynet+ Devices

What is Anynet+?

Anynet+ is a function that enables you to control all connected Samsung devices that support Anynet+ with your Samsung TV's remote. The Anynet+ system can be used only with Samsung devices that have the Anynet+ feature. To be sure your Samsung device has this feature, check if there is an Anynet+ logo on it.

To connect to a TV



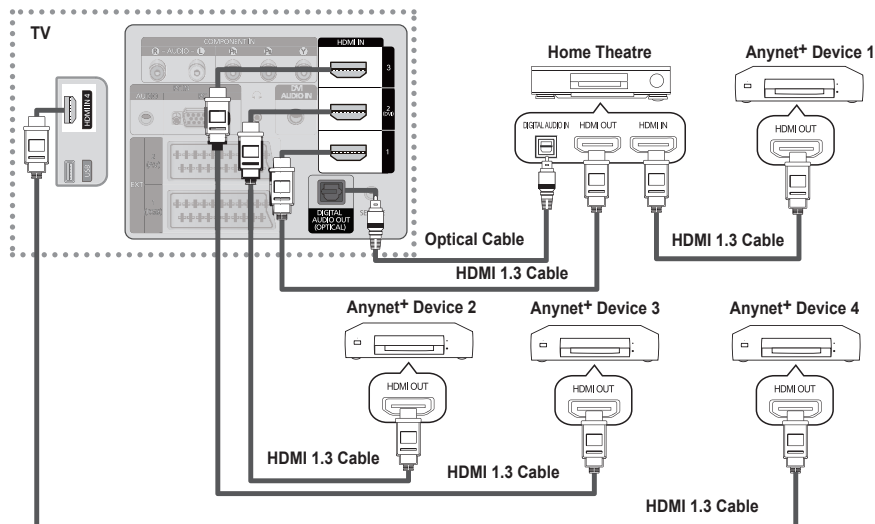
Connect the HDMI IN (1, 2(DVI), 3 or 4) jack on the TV and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.

To connect to Home Theatre

45

English

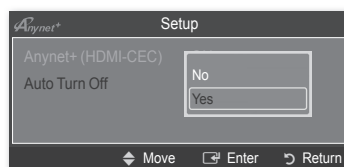
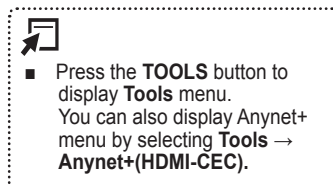
Anynet+



- 1** Connect the HDMI IN (1, 2(DVI), 3 or 4) jack on the TV and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.
- 2** Connect the HDMI IN jack of the home theater and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.
 - Connect the Optical cable between the DIGITAL AUDIO OUT (OPTICAL) jack on your TV and the Digital Audio Input on the Home Theater.
 - When following the connection above, the Optical jack only outputs 2 channel audio. You will only hear sound from the Home Theater's Front Left and Right speakers and the subwoofer. If you want to hear 5.1 channel audio, connect the DIGITAL AUDIO OUT (OPTICAL) jack on the DVD player or Cable/Satellite Box (ie Anynet Device 1 or 2) directly to the Amplifier or Home Theater, not the TV.
 - Connect only one Home Theater.
 - You can connect an Anynet+ device using the HDMI 1.3 cable. Some HDMI cables may not support Anynet+ functions.
 - Anynet+ works when the AV device supporting Anynet+ is in the Standby or On status.
 - Anynet+ supports up to 12 AV devices in total. Note that you can connect up to 3 devices of the same type.
 - Anynet+ supports up to 3 devices simultaneously.

Setting Up Anynet+

Option	Description
Setup	■ Anynet+ (HDMI-CEC) → Off / On To use the Anynet+ Function, Anynet+ (HDMI-CEC) must be set to On. • When the Anynet+ (HDMI-CEC) function is disabled, all the Anynet+ related operations are deactivated. ■ Auto Turn Off → No / Yes Setting an Anynet+ Device to turn Off automatically when the TV is turned Off. • The active source on the TV remote must be set to TV to use the Anynet+ function. • If you set Auto Turn Off to Yes, connected external devices are also turned off when the TV is turned off. If an external device is still recording, it may or may not turn off.



Switching between Anynet+ Devices

- 1 Press the **TOOLS** button. Press the **ENTER** button to select **Anynet+ (HDMI-CEC)**.
- 2 Press the **▲** or **▼** button to select **Device List**, then press the **ENTER** button.
 - Anynet+ devices connected to the TV are listed. If you cannot find a device you want, press the red button to scan for devices.
 - Only when you set **Anynet+ (HDMI-CEC)** to **On** in the **Setup** menu, the **Device List** menu appears.
- 3 Press the **▲** or **▼** button to select to a particular device and press the **ENTER** button. It is switched to the selected device.
 - Switching to the selected devices may take up to 2 minutes. You cannot cancel the operation during the switching operation.
 - The time required to scan for devices is determined by the number of connected devices.
 - If you have selected external input mode by pressing the **SOURCE** button, you cannot use the Anynet+ function. Make sure to switch to an Anynet+ device by using the **Device List**.



Anynet+ Menu

The **Anynet+** menu changes depending on the type and status of the Anynet+ devices connected to the TV.

Option	Description
View TV	Anynet+ mode changes to TV broadcast mode.
Device List	Shows the Anynet+ device list.
(device_name) MENU	Shows the connected device menus. E.g. If a DVD recorder is connected, the disc menu of the DVD recorder will appear.
(device_name) INFO	Shows the play menu of the connected device. E.g. If a DVD recorder is connected, the play menu of the DVD recorder will appear.
Record: (*recorder)	Starts recording immediately using the recorder. (This is only available for devices that support the recording function.)
(*recorder) Reserve Recording	Enables reserving a recording for the recorder. (This is only available for devices that support the recording reservation function.)
Stop Recording: (*recorder)	Stops recording.
Receiver	Sound is played through the receiver.



- If more than one recording device is connected, they are displayed as (*recorder) and if only one recording device is connected, it will be represented as (*device_name).

TV Remote Control Buttons Available in Anynet+ Mode

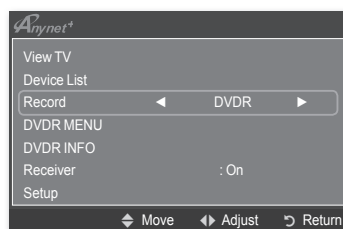
Device Type	Operating Status	Available Buttons
Anynet+ Device	After switching to the device, when the menu of the corresponding device is displayed on the screen.	Numeric buttons ▲/▼/◀/▶/ENTER buttons Colour buttons / EXIT button
	After switching to the device, while playing a file	◀ (Backward search) / ▶ (Forward search) / (Stop) / (Play) / (Pause)
Device with built-in Tuner	After switching to the device, when you are watching a TV programme	P / button
Audio Device	When Receiver is activated	/ button MUTE button

- The Anynet+ function only works when the active source on the TV remote control is set to TV.
- The button works only while in the recordable state.
- You cannot control Anynet+ devices using the buttons on the TV. You can control Anynet+ devices only using the TV remote control.
- The TV remote control may not work under certain conditions. In this case, reselect the Anynet+ device.
- The Anynet+ functions do not operate with other manufacturers' products.
- The , operations may differ depending on the device.

Recording

You can make a recording of a TV programme using a Samsung recorder.

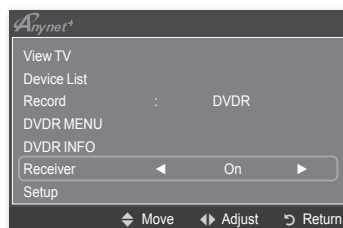
- 1 Press the **TOOLS** button. Press the **ENTER**  button to select **Anynet+ (HDMI-CEC)**.
- 2 Press the **▲** or **▼** button to select **Record: (device_name)**, then press the **ENTER**  button. Recording begins.
 - **When there is more than one recording device**
When multiple recording devices are connected, the recording devices are listed. Press the **▲** or **▼** button to select a recording device and press the **ENTER**  button. Recording begins.
 - **When the recording device is not displayed**
Select **Device List** and press the red button to search devices.
- 3 Press the **EXIT** button to exit.
 - Pressing the  button will record whatever you are currently watching. If you are watching video from another device, the video from the device is recorded.
 - Before recording, check whether the antenna jack is properly connected to the recording device. To properly connect an antenna to a recording device, refer to the recording device's users manual.



Listening through a Receiver (Home Theatre)

You can listen to sound through a receiver instead of the TV speaker.

- 1 Press the **TOOLS** button. Press the **ENTER**  button to select **Anynet+ (HDMI-CEC)**.
- 2 Press the **▲** or **▼** button to select **Receiver**. Press the **◀** or **▶** button to select **On** or **Off**.
- 3 Press the **EXIT** button to exit.
 - If your receiver supports audio only, it may not appear in the device list.
 - The receiver will work when you have properly connected the Optical IN jack of the receiver to the Optical Out jack of the TV.
 - When the receiver (home theater) is set to On, you can hear sound output from the TV's Optical jack. When the TV is displaying a DTV(air) signal, the TV will send out 5.1 channel sound to the Home theater receiver. When the source is a digital component such as a DVD and is connected to the TV via HDMI, only 2 channel sound will be heard from the Home Theater receiver.
 - When using the Media Play feature, sound may not output properly through the receiver.
 - If there is a power interruption to the TV when the **Receiver** is set to **On** (by disconnecting the power cord or a power failure), the **Speaker Select** may be set to **External Speaker** when you turn the TV on again.



Troubleshooting for Anynet+

Symptom	Solution
Anynet+ does not work.	- Check if the device is an Anynet+ device. The Anynet+ system supports Anynet+ devices only. - Connect only one receiver (home theatre). - Check if the Anynet+ device power cord is properly connected. - Check the Anynet+ device's Video/Audio/HDMI 1.3 cable connections. - Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+ setup menu. - Check whether the TV remote control is in TV mode. - Check whether it is Anynet+ exclusive remote control. - Anynet+ doesn't work in certain situations. (Searching channels, Operating Media Play, Plug & Play, etc.) - When connecting or removing the HDMI 1.3 cable, please make sure to search devices again or turn your TV off and on again. - Check if the Anynet+ Function of Anynet+ device is set on.
I want to start Anynet+.	- Check if the Anynet+ device is properly connected to the TV and check if the Anynet+ (HDMI-CEC) is set to On in the Anynet+ Setup menu. - Press the TV button on the TV remote control to switch to TV. Then press the TOOLS button to show the Anynet+ menu and select a menu you want.
I want to exit Anynet+.	- Select View TV in the Anynet+ menu. - Press the SOURCE button on the TV remote control and select a device other than Anynet+ devices. (Note that the channel button operates only when a tuner-embedded Anynet+ device is not connected.)
The message 'Connecting to Anynet+ device...' appears on the screen.	- You cannot use the remote control when you are configuring Anynet+ or switching to a view mode. - Use the remote control when the Anynet+ setting or switching to view mode is complete.
The Anynet+ device does not play.	You cannot use the play function when Plug & Play is in progress.
The connected device is not displayed.	- Check whether or not the device supports Anynet+ functions. - Check whether or not the HDMI 1.3 cable is properly connected. - Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+ setup menu. - Search Anynet+ devices again. - You can connect an Anynet+ device using the HDMI 1.3 cable only. Some HDMI cables may not support Anynet+ functions. - If it is terminated by an abnormal situation such as disconnecting the HDMI cable or power cord or a power failure, please repeat the device scan.
The TV programme cannot be recorded.	Check whether the antenna jack on the recording device is properly connected.
The TV sound is not output through the receiver.	Connect the optical cable between TV and the receiver.

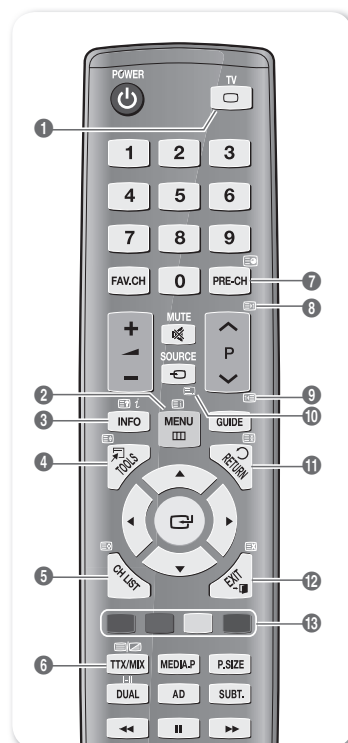
Other Information

Teletext Feature

Most television stations provide written information services via Teletext. The index page of the Teletext service gives you information on how to use the service. In addition, you can select various options to suit your requirements by using the remote control buttons.

- For Teletext information to be displayed correctly, channel reception must be stable. Otherwise, information may be missing or some pages may not be displayed.

- 1 (exit)
Exit from the teletext display.
- 2 (index)
Used to display the index (contents) page at any time while you are viewing teletext.
- 3 (reveal)
Used to display the hidden text (answers to quiz games, for example). To display normal screen, press it again.
- 4 (size)
Press to display the double-size letters in the upper half of the screen. For lower half of the screen, press it again. To display normal screen, press it once again.
- 5 (store)
Used to store the teletext pages.
- 6 (teletext on/mix)
Press to activate teletext mode after selecting the channel providing the teletext service. Press it twice to overlap the teletext with the current broadcasting screen.
- 7 (sub-page)
Used to display the available sub-page.
- 8 (page up)
Used to display the next teletext page.
- 9 (page down)
Used to display the previous teletext page.
- 10 (mode)
Press to select the teletext mode (LIST/FLOF). If you press it in the LIST mode, it switches into the List save mode. In the List save mode, you can save teletext page into list using the (store) button.
- 11 (hold)
Used to hold the display on a given page if the selected page is linked with several secondary pages which follow on automatically. To resume, press it again.
- 12 (cancel)
Used to display the broadcast when searching for a page.
- 13 **Colour buttons (red/green/yellow/blue)**
If the FASTEXT system is used by a broadcasting company, the different topics covered on a teletext page are colour-coded and can be selected by pressing the coloured buttons. Press one of them corresponding to the required. The page is displayed with other coloured information that can be selected in the same way. To display the previous or next page, press the corresponding coloured button.

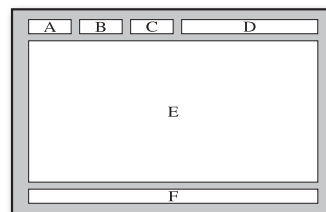


- You can change teletext pages by pressing the numeric buttons on the remote control.

The Teletext pages are organized according to six categories:

Part	Contents
A	Selected page number.
B	Broadcasting channel identity.
C	Current page number or search indications.
D	Date and time.
E	Text.
F	Status information.
	FASTEXT information.

- Teletext information is often divided between several pages displayed in sequence, which can be accessed by:
 - Entering the page number
 - Selecting a title in a list
 - Selecting a coloured heading (FASTEXT system)



- Press the TV button to exit from the teletext display.

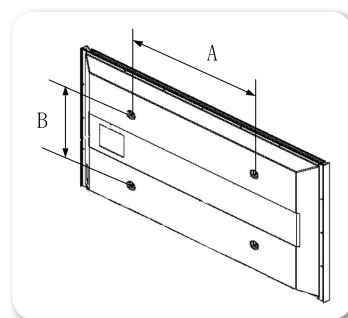
Wall Mount Kit Specifications (VESA)

Install your wall mount on a solid wall perpendicular to the floor.

When attaching to other building materials, please contact your nearest dealer.

If installed on a ceiling or slanted wall, it may fall and result in severe personal injury.

Product Family	inch	VESA Spec. (A * B)	Standard Screw	Quantity
LCD-TV	19"~22"	100 * 100	M4	4
	23"~29"	200 * 100		
	30"~40"	200 * 200	M6	
	46"~55"	400 * 400	M8	
	57"~70"	800 * 400		
	80" ~	1400 * 800		
PDP-TV	42"~ 50"	400 * 400	M8	4
	58"~ 63"	600 * 400		
	70" ~	800 * 400		
	80" ~	1400 * 800		



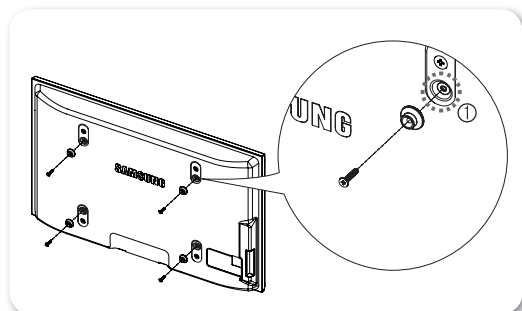
- We provided the standard dimensions for wall mount kits as shown in the table above.
- When purchasing our wall mount kit, a detailed installation manual and all parts necessary for assembly are provided.
- Do not use screws longer than the standard dimension, as they may cause damage to the inside of the TV set.
- For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on their specifications.
- Do not use screws that do not comply with the VESA standard screw specifications.
- Do not use fasten the screws too strongly, this may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.
- Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.
- Our 57" and 63" models do not comply with VESA Specifications. Therefore, you should use our dedicated wall mount kit for this model.
- Do not exceed 15 degrees tilt when mounting this TV.



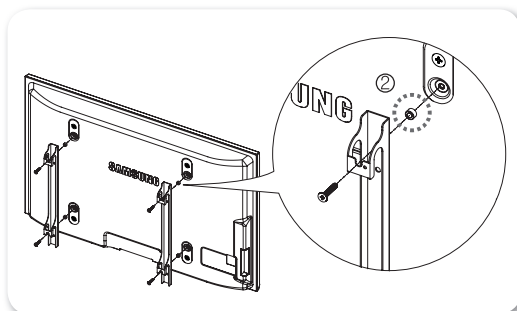
Do not install your Wall Mount Kit while your TV is turned on.
It may result in personal injury due to electric shock.

Preparing before installing Wall- Mount on the wall

Case A. Installing SAMSUNG Wall-Mount



Case B. Installing other company's Wall-Mount



- 1** Install Wall Mount with the torque range of 15kgf·cm or less. Make sure that parts can be damaged if the torque is out of the specified range.
- 2** Accessory Kit contains Holder-Ring [②] for installing other company's Wall-Mount on Samsung TV. (Case B)
 - screw down the hole [①] when installing wall-mount on the wall.

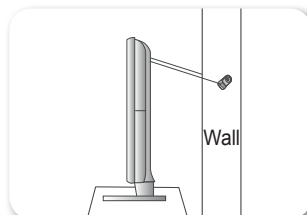
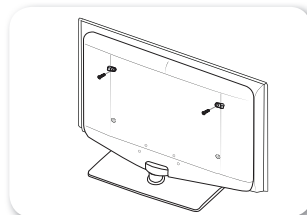
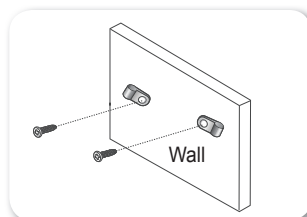
Securing the TV to the Wall



Pulling, pushing, or climbing on the TV may cause the TV to fall. In particular, ensure your children do not hang over or destabilize the TV; doing so may cause the TV to tip over, causing serious injuries or death. Follow all safety precautions provided on the included Safety Flyer. For added stability, install the anti-fall device for safety purposes, as follows.

To avoid the TV from falling

- 1** Put the screws into the clamps and firmly fasten them onto the wall. Confirm that the screws have been firmly installed onto the wall.
 - You may need additional material such as an anchor depending on the type of wall.
 - Since the necessary clamps, screws, and string are not supplied, please purchase these additionally.
- 2** Remove the screws from the center back of the TV, put the screws into the clamps, and then fasten the screws onto the TV again.
 - Screws may not be supplied with the product.
- 3** Connect the clamps fixed onto the TV and the clamps fixed onto the wall with a strong string and then tie the string tightly.
 - Install the TV near to the wall so that it does not fall backwards.
 - It is safe to connect the string so that the clamps fixed on the wall are equal to or lower than the clamps fixed on the TV.
 - Untie the string before moving the TV.
- 4** Verify all connections are properly secured. Periodically check connections for any sign of fatigue for failure. If you have any doubt about the security of your connections, contact a professional installer.

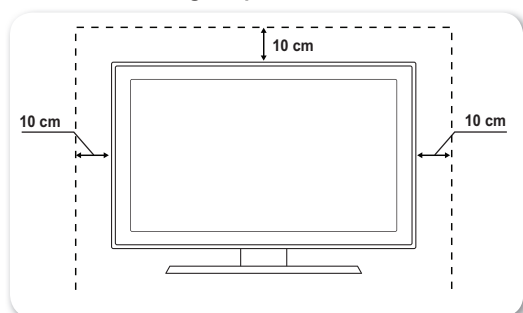


Securing the Installation Space

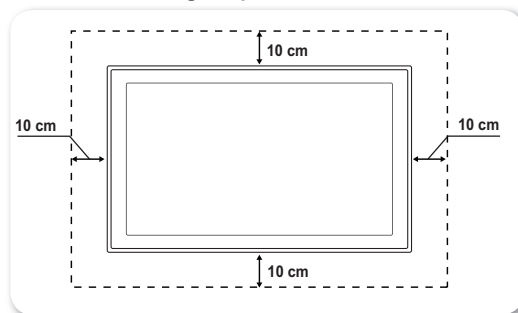
Keep the required distances between the product and other objects (e.g. walls) to ensure proper ventilation. Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature of the product. Install the product so the required distances shown in the figure are kept.

- When using a stand or wall-mount, use parts provided by Samsung Electronics only.
 - If you use parts provided by another manufacturer, it may result in a problem with the product or an injury due to the product falling.
 - If you use parts provided by another manufacturer, it may result in a problem with the product or fire due to an increase in the internal temperature of the product due to poor ventilation.
- The appearance may differ depending on the product.

■ When installing the product with a stand



■ When installing the product with a wall-mount



Troubleshooting

Before contacting the Samsung after-sales service, perform the following simple checks.

If you cannot solve the problem using the instructions below, note the model and serial number of the television and contact your local dealer.

No sound or picture	• Check that the mains lead has been connected to a wall socket. • Check that you have pressed the button on your set. • Check the picture contrast and brightness settings. • Check the volume. • Check if Speaker Select is set to External Speaker.
Normal picture but no sound	• Check the volume. • Check whether the MUTE button has been pressed on the remote control.
No picture or black and white picture	• Adjust the colour settings. • Check that the broadcast system selected is correct.
Sound and picture interference	• Try to identify the electrical appliance that is affecting the television, then move it further away. • Plug the television into a different main socket.
Blurred or snowy picture, distorted sound	• Check the direction, location and connections of your aerial. • This interference often occurs due to the use of an indoor aerial.
Remote control malfunctions	• Replace the remote control batteries. • Clean the upper edge of the remote control (transmission window). • Check that the + and – ends of the batteries are inserted correctly. • Check that the batteries are drained.
Screen is black and power indicator light blinks steadily	• On your computer check; Power, Signal Cable. • Move the computer's mouse or press any key on the keyboard. • On your equipment check (STB, DVD, etc) ; Power, Signal Cable. • The TV is using its power management system. • Press the Source button on the panel or remote control. • Turn the TV off and on.
The damaged picture appears in the corner of the screen.	• If Screen Fit is selected in some external devices, the damaged picture may appear in the corner of the screen. This symptom is caused by external devices, not TV.
The "Resets all settings to the default values" message appears.	• This appears when you press and hold the EXIT button for a while. The product settings are reset to the factory defaults.

Specifications

The descriptions and characteristics in this booklet are given for information purposes only and are subject to modification without notice.

Model Name	PS50B550 / PS50B551
Screen Size (Diagonal)	50 inch
PC Resolution (Optimum)	1920 x 1080 @ 60 Hz
Sound (Output)	10 W x 2
Dimension (WxHxD)	
Body	1240 x 766 x 74 mm
With stand	1240 x 822 x 290 mm
Weight	
Body	33 kg
With stand	38 kg
Environmental Considerations	
Operating Temperature	50 °F to 104 °F (10 °C to 40 °C)
Operating Humidity	10% to 80%, non-condensing
Storage Temperature	-4 °F to 113 °F (-20 °C to 45 °C)
Storage Humidity	5% to 95%, non-condensing

- This device is a Class B digital apparatus.
- Design and specifications are subject to change without prior notice.
- For the power supply and Power Consumption, refer to the label attached to the product.

Software License

This product uses parts of the software from the Independent JPEG Group. This product uses parts of the software owned by the Freetype Project (www.freetype.org). This product uses some software programs which are distributed under the GPL/LGPL license. Accordingly, the following GPL and LGPL software source codes that have been used in this product can be provided after asking to vdswmanager@samsung.com. GPL software: Linux Kernel, Busybox, Binutils LGPL software: Glibc, ffmpeg, smpeg, libgphoto, libusb, SDL

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Version 3, 29 June 2007

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TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any nonsource form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

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Version 3, 29 June 2007

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Warning! Important Safety Instructions

Please read the appropriate section that corresponds to the marking on your Samsung product before attempting to install the product.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED PERSONNEL.



This symbol indicates that high voltage is present inside. It is dangerous to make any kind of contact with any internal part of this product.



This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

- The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of this apparatus, and to protect it from overheating, these slots and openings must never be blocked or covered.
 - Do not cover the slots and openings with a cloth or other materials.
 - Do not block the slots and openings by placing this apparatus on a bed, sofa, rug or other similar surface.
 - Do not place this apparatus in a confined space, such as a bookcase, or built-in cabinet, unless proper ventilation is provided.
 - Give your product 10 cm (4 inch) clearance from the wall.
- Do not place this apparatus near or over a radiator or heat resistor, or where it is exposed to direct sunlight.
- Do not place heat generating items such as candles, ashtrays, incense, flammable gas or explosive materials near the product.
- Do not place a water containing vessel on this apparatus, as this can result in a risk of fire or electric shock.
- Do not expose this apparatus to rain or place it near water (near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool etc.). If this apparatus accidentally gets wet, unplug it and contact an authorized dealer immediately. Make sure to pull out the power cord from the outlet before cleaning.
- This apparatus uses batteries. In your community there might be regulations that require you to dispose of these batteries properly under environmental considerations. Please contact your local authorities for disposal or recycling information.
- Do not overload wall outlets, extension cords or adaptors beyond their capacity, since this can result in fire or electric shock.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plug end, adaptors and the point where they exit from the appliance.
- To protect this apparatus from a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system.

This will prevent damage to the set due to lightning and power line surges.
- Before connecting the AC power cord to the DC adaptor outlet, make sure the voltage designation of the DC adaptor corresponds to the local electrical supply.
- Never insert anything metallic into the open parts of this apparatus. Doing so may create a danger of electric shock.
- To avoid electric shock, never touch the inside of this apparatus. Only a qualified technician should open this apparatus.
- Make sure to plug the power cord in until it is firmly inserted. When removing the power cord, make sure to hold the power plug when pulling the plug from the outlet. Do not touch the power cord with wet hands.
- If this apparatus does not operate normally - in particular, if there are any unusual sounds or smells coming from it
 - unplug it immediately and contact an authorized dealer or service center.
- Be sure to pull the power plug out of the outlet if the TV is to remain unused or if you are to leave the house for an extended period of time (especially when children, elderly or disabled people will be left alone in the house).
 - Accumulated dust can cause an electric shock, an electric leakage or a fire by causing the power cord to generate sparks and heat or the insulation to deteriorate.
- Be sure to contact an authorized service center, when installing your set in a location with heavy dust, high or low temperatures, high humidity, chemical substances and where it operates for 24 hours such as the airport, the train station etc. Failure to do so may cause serious damage to your set.
- Use only a properly grounded plug and receptacle.
 - An improper ground may cause electric shock or equipment damage. (Class I Equipment only.)
- To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.
- Do not allow children to hang onto the product.
- Store the accessories (battery, etc.) in a location safely out of the reach of children.
- Do not install the product in an unstable location such as a shaky shelf, a slanted floor or a location exposed to vibration.
- Do not drop or impart any shock to the product. If the product is damaged, disconnect the power cord and contact a service center.



WARNING - TO PREVENT THE SPREAD OF FIRE, KEEP CANDLES OR OTHER OPEN FLAMES AWAY FROM THIS PRODUCT AT ALL TIMES.

Wiring the Mains Power Supply Plug (UK Only)

IMPORTANT NOTICE

The mains lead on this equipment is supplied with a moulded plug incorporating a fuse. The value of the fuse is indicated on the pin face of the plug and, if it requires replacing, a fuse approved to BS11362 of the same rating must be used. Never use the plug with the fuse cover omitted if the cover is detachable. If a replacement fuse cover is required, it must be of the same colour as the pin face of the plug. Replacement covers are available from your dealer.

If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitably approved extension lead or consult your dealer for assistance. However, if there is no alternative but to cut off the plug, remove the fuse and then safely dispose of the plug.

Do NOT connect the plug to a mains socket as there is a risk of shock hazard from the bared flexible cord.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

BLUE - NEUTRAL BROWN - LIVE

As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows :

The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK.

The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

WARNING:

DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL, WHICH IS MARKED WITH THE LETTER E OR BY THE EARTH SYMBOL ⊕, OR COLOURED GREEN OR GREEN AND YELLOW.

Warranty Card



UNITED KINGDOM

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Samsung Electronics U.K. Ltd.

Customer Care Centre

PO Box 17243

Edinburgh, EH11 4YB

United Kingdom

Tel: 0870 SAMSUNG (7267864)(UK & Northern Ireland)

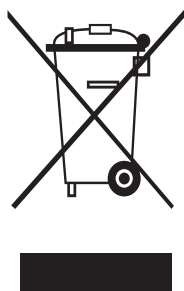
Tel: 0818 717 100 (EIRE Only)

Fax: +44 0845 650 8080

Web : www.samsung.com

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(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

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